SANYO

FILE NO.

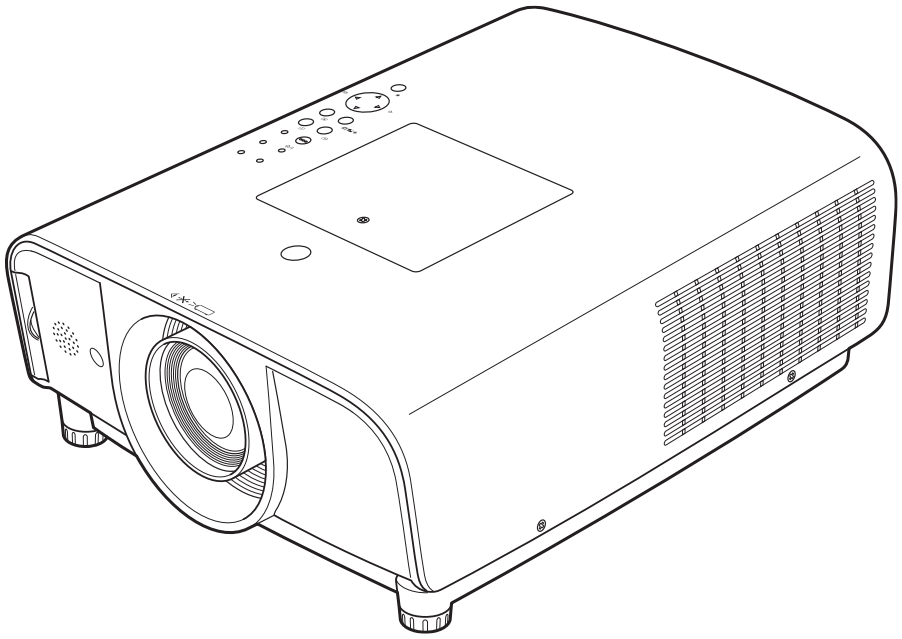
SERVICE MANUAL

Multimedia Projector

Model No. PLC-ET30L

U.S.A, Canada,
Europe, U.K, Asia

Original Version



** Projeccton Lens is optional*

Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual.
If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing the unit.

→ **Chassis No. KF7-ET30L00**

PRODUCT CODE
1 122 427 20 (KF7AL)
1 122 428 20 (LF7AL)
1 122 428 22 (LF7CL)

REFERENCE NO. SM5110953-00

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Safety Instructions

Safety Precautions

WARNING:
The chassis of this projector is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line (⎓) in the schematic diagram. For continued product safety and protection of personnel injury, servicing should be made with qualified personnel.

The following precautions must be observed.

1: An isolation transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.

2: Comply with all caution and safety-related notes provided on the cabinet back, cabinet bottom, inside the cabinet or on the chassis.

3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, etc.

DO NOT OPERATE THIS PROJECTOR WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.

4: Before replacing the cabinet cover, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

Before returning any projector to the customer, the service personnel must be sure it is completely safe to operate without danger of electric shock.

Product Safety Notice

Product safety should be considered when a component replacement is made in any area of the projector. Components indicated by mark ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of there parts must be made by exactly the same parts.

Service Personnel Warning

Eye damage may result from directly viewing the light produced by the Lamp used in this equipment. Always turn off Lamp before opening cover. The Ultraviolet radiation eye protection required during this servicing.
Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages (15kV - 25kV) at its starts.
Since the lamp is very high temperature during units operation replacement of the lamp should be done at least 45 minutes after the power has been turned off, to allow the lamp cool-off.

DO NOT ATTEMPT TO SERVICING THE REMOTE CONTROL UNIT.

Laser Beam may be leaked out when in disassemble the Unit. As the Laser Beam used in this Remote control unit is harmful to the eyes.
If the remote control unit is failed, replace with new one.

Specifications

Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	13.7" x 6.46" x.17.48" (348.1 mm x 164 mm x 444 mm) (Not including adjustable feet)
Net Weight	17.86 lbs (8.1 kg)
Feet Adjustment	0˚ to 5.0˚

Panel Resolution

LCD Panel System	1.0" TFT Active Matrix type, 3 panels
Panel Resolution	1,400 x 1,050 dots
Number of Pixels	4,410,000 (1,400 x 1,050 x 3 panels)

Signal Compatibility

Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M, and PAL-N
High Definition TV Signal	480i, 480p, 575i, 575p, 720p, 1035i, and 1080i
Scanning Frequency	H-sync. 15 kHz–100 kHz, V-sync. 50 Hz–100 Hz

Optical Information

Projection Lamp	330 W

Interface

Input 1	Digital (DVI-D) x 1, Analog (Mini D-sub 15 pin) x 1
Input 2	BNC Type x 5 (G or Video/Y, B or Cb-Pb, R or Cr-Pr, HV and V)
Input 3	RCA Type x 1, Mini DIN 4 pin x 1
AUDIO IN	Audio 1 (Mini Type stereo), Audio 2 (Mini Type stereo), Audio 3 (RCA Type) x 2
Analog Out	Mini D-sub 15 pin x 1
Audio Out	Audio (Mini Type stereo) x 1
R/C Jack	Mini Type (Wired Remote) x 1
Control Port	Mini DIN 8 pin x 1
USB Connector	USB Series B x 1
Option	PJ-Net Organizer Terminal x 1

Audio

Internal Audio Amp	1.0 W RMS
Built-in Speaker	1 speaker, ø1.1" (28 mm)

Power

Voltage and Power Consumption	AC 100–120 V (4.6A Max. Ampere), 50/60 Hz (The U.S.A and Canada) AC 200–240 V (2.3A Max. Ampere), 50/60 Hz (Continental Europe and The U.K.)

Operating Environment

Operating Temperature	41˚F–95˚F (5˚C–35˚C)
Storage Temperature	14˚F–140˚F (-10˚C–60˚C)

Remote Control

Battery	AAA or LR03 Type x 2
Operating Range	16.4' (5 m/±30˚)
Dimensions	1.8" (W) x 1.0" (H) x 5.7" (D) (45 mm x 25 mm x 145 mm)
Net Weight	3.5 oz (99 g) (including batteries)
Laser Pointer	Class II Laser (Max. Output: 1 m W/Wave length: 640–660 nm)

c UL US LISTED

This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

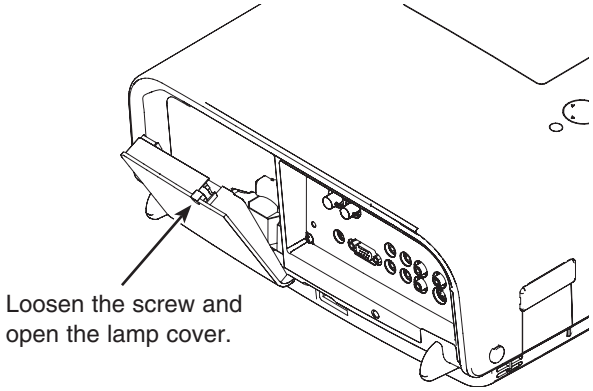
Circuit Protections

This projector provides the following circuit protections to operate in safety. If the abnormality occurs inside the projector, it will automatically turn off by operating one of the following protection circuits.

Fuse

A fuse is located inside of the projector. When the POWER indicator is not lightning, the fuse may be opened. Check the fuse as following steps.
The fuse should be used with the following type;

Fuse Part No. : 323 027 2605
TYPE T10.0AH 250V FUSE
215010. LITTEL

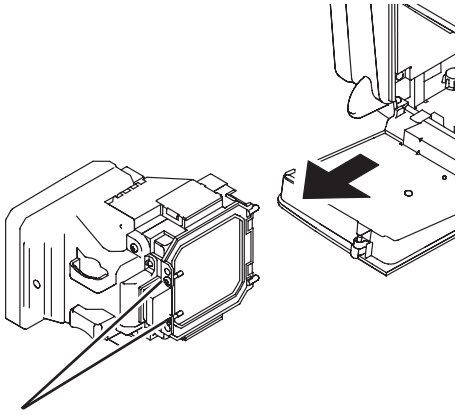


Loosen the screw and open the lamp cover.

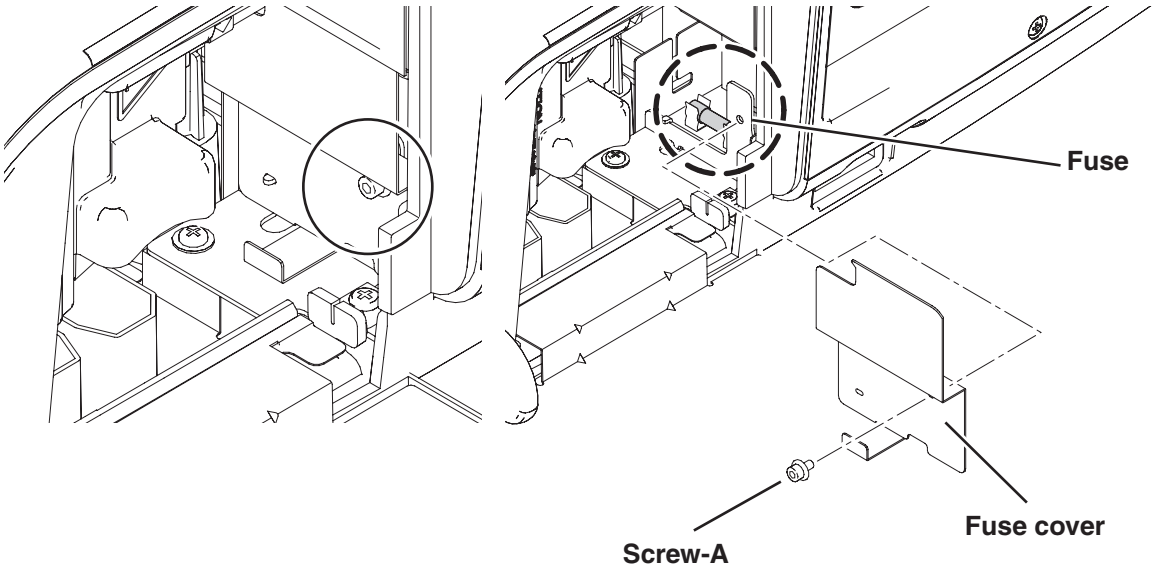
How to replace the fuse

1. Loosen the screw of the lamp cover and open the lamp cover.
2. Loosen 2 screws of lamp ass'y and pull out the lamp ass'y.
3. Remove the screw-A and remove the fuse cover following to "Mechanical Disassembly".
4. Remove the fuse from fuse holder on the Power(Filter) board .

To install the fuse, take reversed step in the above.

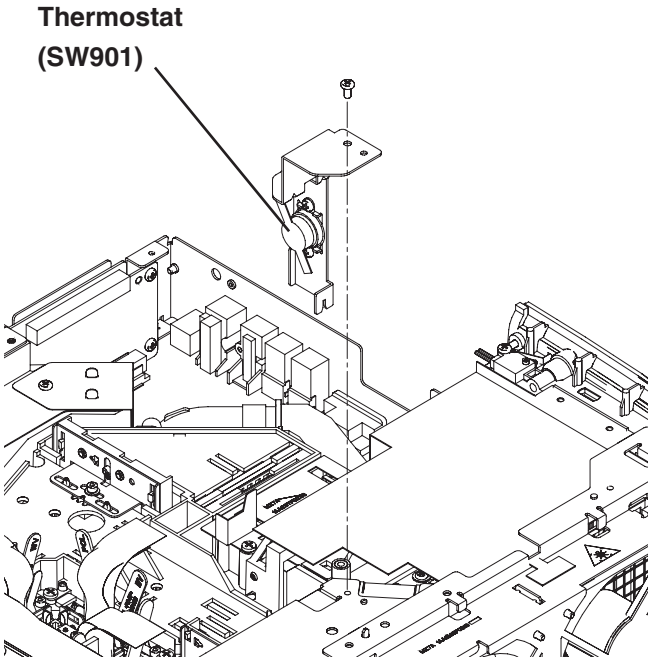


Loosen the 2 screws and pull out the lamp ass'y.



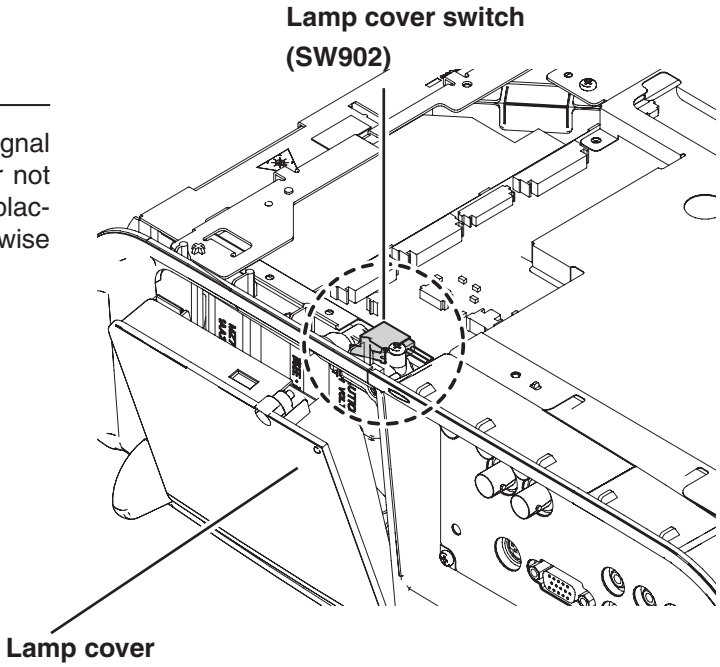
Thermostat (SW901)

There is the thermostat (SW901) inside of the projector to detect the internal temperature rising abnormally. When the internal temperature reaches near 100˚C, the thermostat opens to stop the operation of the power supply circuit.
The thermostat will automatically return to normal condition when the internal temperature becomes normal (about 60˚C).



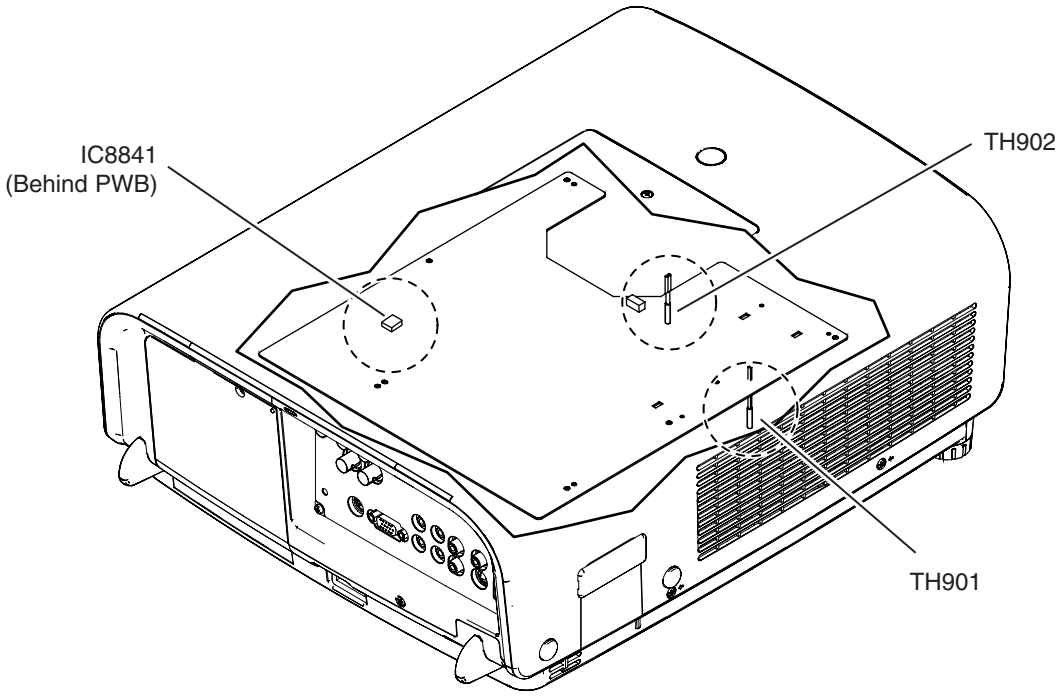
Lamp cover switch (SW902)

The lamp cover switch (SW902) cuts off the drive signal to the lamp circuit when the lamp cover is removed or not closed completely. After opening the lamp cover for replacing the lamp ass'y, place the lamp cover correctly otherwise the projector can not turn on.



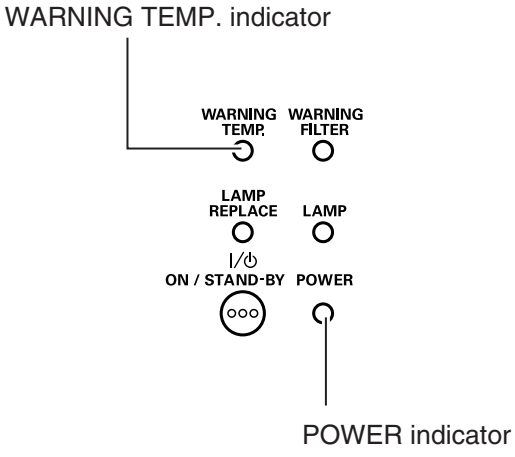
Temperature sensors (TH901, TH902, IC8841)

The projector provides a temperature sensor IC on the Main board and 2 thermistors. The temperature sensor IC monitors around the lamp house, the thermistors are placed on the blue panel holder and on the intake duct.
- Internal temperature sensor A (IC8841) (around the lamp house)
- Panel sensor B (TH902) (around the blue panel)
- Room temperature sensor C (TH901) (around the intake duct)



The projector is shut down and the WARNING TEMP. indicator is blinking red.

When the temperature inside the projector reaches a certain level, the WARNING TEMP. indicator is blinking slowly. When the inside temperature becomes high, the projector will be automatically shut down to protect the inside of the projector. The WARNING TEMP. indicator is blinking faster and the POWER indicator is blinking. The POWER indicator is blinking while the projector is being cooled down. When the projector has cooled down enough (to its normal operating temperature), it can be turned on again by pressing the ON/STAND-BY button.



✔***Note:***
- The WARNING TEMP. indicator continues to blink even after the temperature inside the projector returns to normal. When the projector is turned on again, the WARNING TEMP. indicator stops blinking.

Power failure and fan lock detection

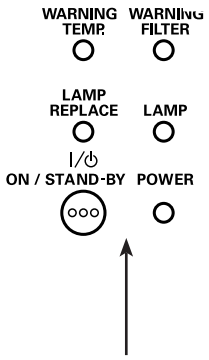
The projector provides the detection circuits of the power failure and the fan lock. When the detection circuit detects an error at the power supply line or at the fan operation circuit, the projector will turn into the standby mode to protect the other circuits defective.

The projector is shut down and all five indicators are blinking.

When the projector detects an abnormal condition, it will be automatically shut down to protect the inside of the projector and all five indicators on the top panel blink. In this case, unplug the AC power cord and plug it, and then turn on the projector once again to verify operation. If the projector cannot be turned on and these indicators are still blinking, unplug the AC power cord.

CAUTION
DO NOT LEAVE THE PROJECTOR WITH THE AC POWER CORD CONNECTED UNDER AN ABNORMAL CONDITION. IT MAY RESULT IN FIRE OR ELECTRIC SHOCK.

Top Control



All five indicators are blinking

Maintenance

Cleaning the Air Filter

Filter prevents dust from accumulating on the optical elements inside the projector. Should the filter becomes clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat buildup and adversely affect the life of the projector. If a "Filter warning" icon (yellow or red) appears on the screen and the WARNING FILTER indicator lights or blinks, clean the filter immediately. Clean the filter by following the steps below.

1 Turn off the projector, and unplug the AC power cord from the AC outlet.

2 First, clean up the dust on the projector and around the air vents.

3 Pull out the filter cover from the projector and then remove the filter.

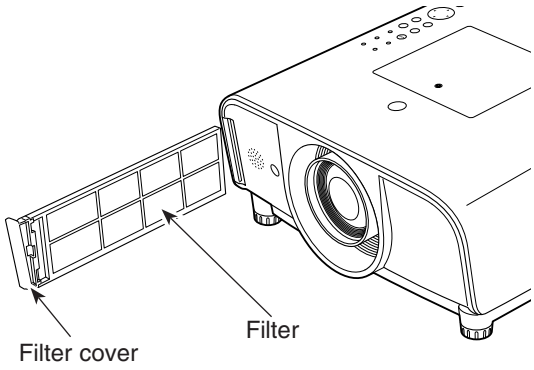
4 Gently clean the filter by using a brush or blower.

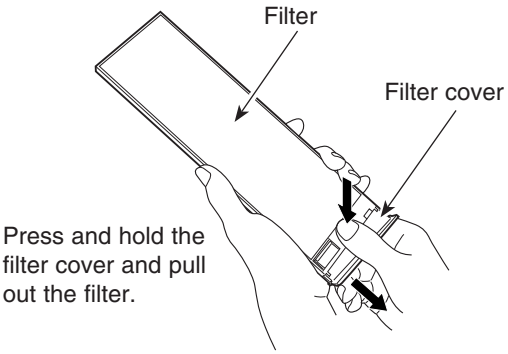
WARNING: Do not wash the filter with water and any other liquid matter. Otherwise the filter may be damaged.

5 Reinstall the filter into the projector properly.

6 Reset the filter counter in the Setting Menu. See "Resetting the Filter Counter" below.

CAUTION
Do not operate the projector with the filter removed. Dust may accumulate on the optical elements degrading picture quality.
Do not put anything into the air vents. Doing so may result in malfunction of the projector.





NOTE: If the filter is heavily clogged and unable to clean, replace it with a new one. Consult your dealer for details.

Replacement Filter Part No.: 910 330 7184

Resetting the Filter Counter

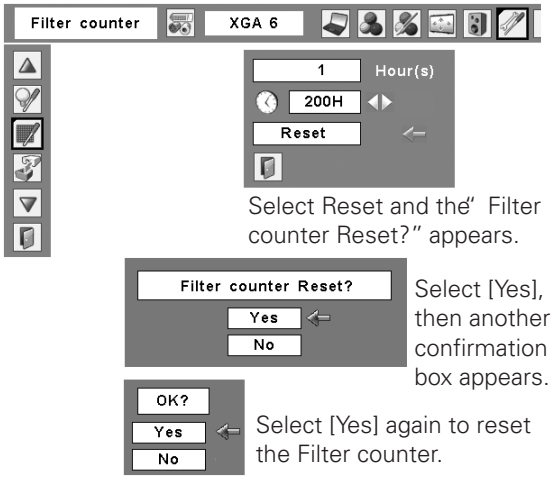
Be sure to reset the Filter counter after cleaning or replacing the filter.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀ ▶ buttons to move the red framed pointer to the Setting Menu icon.

2 Use the Point ▲▼ buttons to move the red framed pointer to Filter counter and then press the SELECT button. A dialog box appears showing the total accumulated time of the filter use, a timer setting option, and the reset option. Select Reset and the "Filter counter Reset?" appears. Select [Yes] to continue.

3 Another confirmation dialog box appears, select [Yes] to reset the Filter counter.

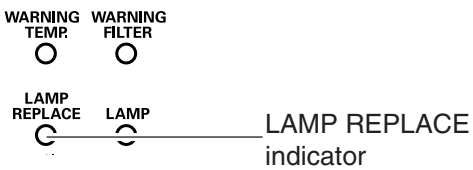
Filter counter



Lamp Replacement

When the projection lamp of the projector reaches its end of life, the Lamp replacement icon appears on the screen and LAMP REPLACE indicator lights yellow. Replace the lamp with a new one promptly. The timing when the LAMP REPLACE indicator should light is depending on the lamp mode.

Top Control



Lamp replacement icon

WARNING:
TURN OFF THE UV LAMP BEFORE OPENING THE LAMP COVER

CAUTION

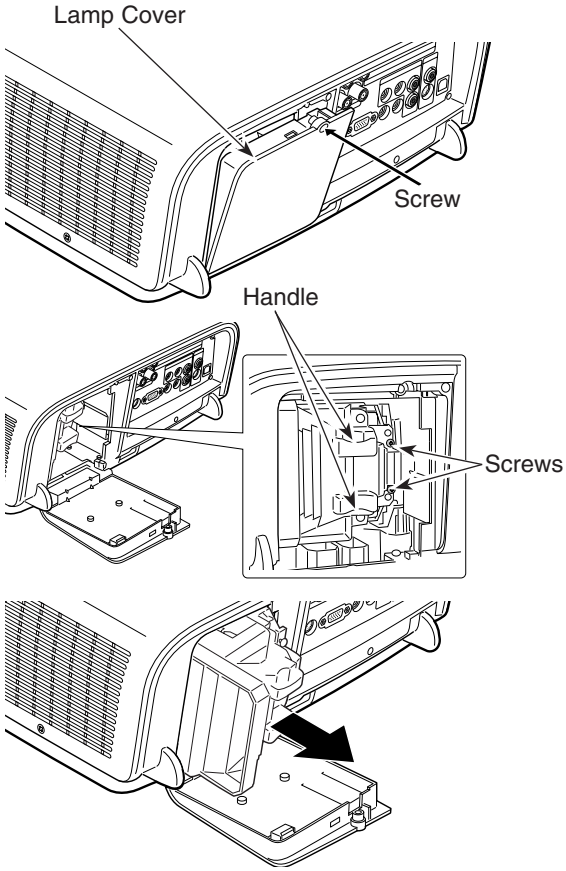
Allow a projector to cool for at least 45 minutes before you open the Lamp cover. The inside of the projector can become very hot.

CAUTION

For continued safety, replace with a lamp of the same type lamp. Do not drop the lamp or touch the glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace the lamp.

1. Turn off the projector and unplug the AC power cord. Let the projector cool for at least 45 minutes.
2. Remove the screw that secures the lamp cover, and then open the lamp cover.
3. Remove the two (2) screws that secure the lamp. Lift the lamp out of the projector by using the handle.
4. Replace the lamp with a new one and secure the two (2) screws. Make sure that the lamp is set properly. Put the lamp cover back and secure it with the screw.
5. Connect the AC power cord to the projector and turn on the projector.
6. Reset the lamp counter.
   See “Resetting the Lamp Counter” on the next page.



ORDER REPLACEMENT LAMP

Type No.	**POA-LMP116**
Service Parts No.	**610 335 8093**

Resetting the Lamp Counter

Be sure to reset the Lamp counter after the lamp is replaced. When the Lamp counter is reset, the LAMP REPLACE indicator stops lighting and the Lamp replacement icon disappears.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀ ▶ buttons to move the red framed pointer to the Setting Menu icon.

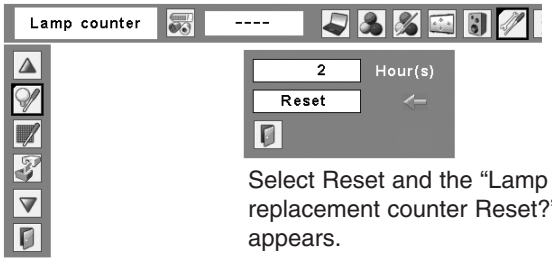
2 Use the Point ▲▼ buttons to move the red framed pointer to Lamp counter and then press the SELECT button. A dialog box appears showing the total accumulated time of the lamp usage and the reset option. Select Reset and the "Lamp replacement counter Reset?" appears. Select [Yes] to continue.

3 Another confirmation dialog box appears, select [Yes] to reset the Lamp counter.

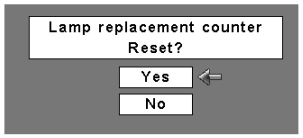
✔***Note:***

- Do not reset the Lamp counter without implementing lamp replacement. Be sure to reset the Lamp counter only after replacing the lamp.

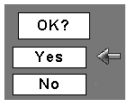
Lamp counter



Select Reset and the "Lamp replacement counter Reset?" appears.



Select [Yes], then another confirmation box appears.



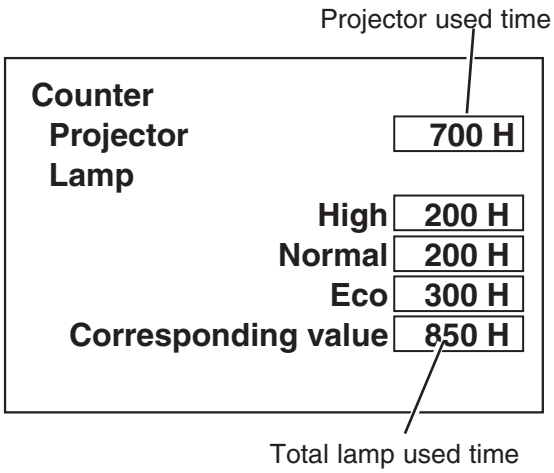
Select [Yes] again to reset the Lamp counter.

How to check Lamp Used Time

The LAMP REPLACE indicator will light yellow when the total lamp used time (Corresponding value) reaches 3,000 hours. This is to indicate that lamp replacement is required.
The total lamp used time is calculated by using the below expression,
Total lamp used time (Corresponding value) = **T***eco* + (**T***normal* x 1.25) + (**T***high* x 1.5)

T*eco*: used time in the Eco mode
T*normal* : used time in the Normal mode
T*high* : used time in the High mode

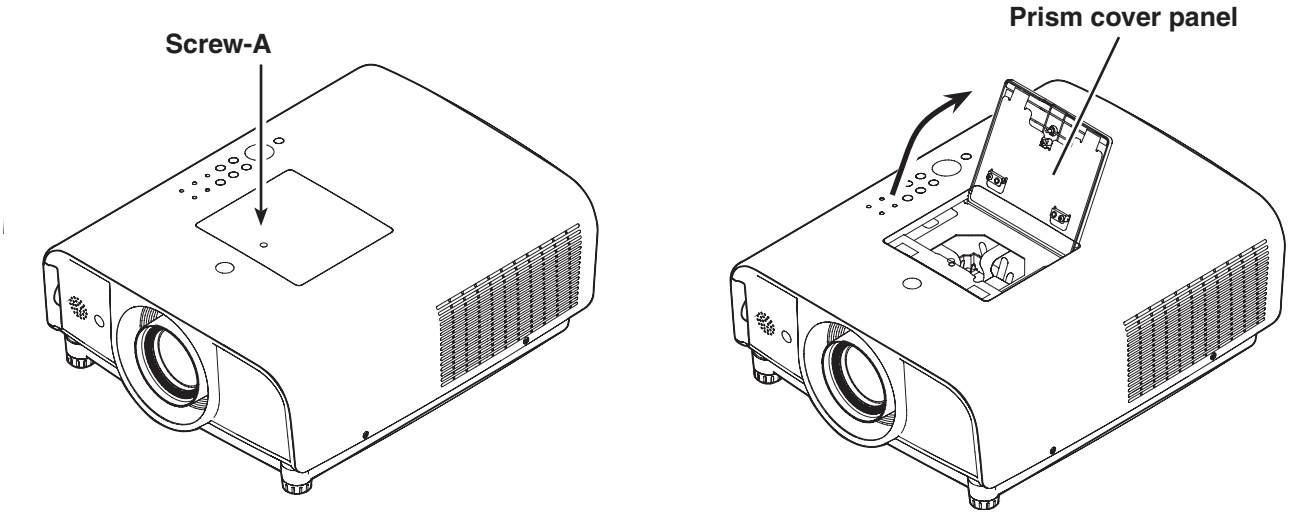
You can check the lamp used time following to the below procedure.
1 Press and hold the **ON/STAND-BY** button on the projector for more than 20 seconds.
2 The projector used time and lamp used time will be displayed on the screen briefly as follows.

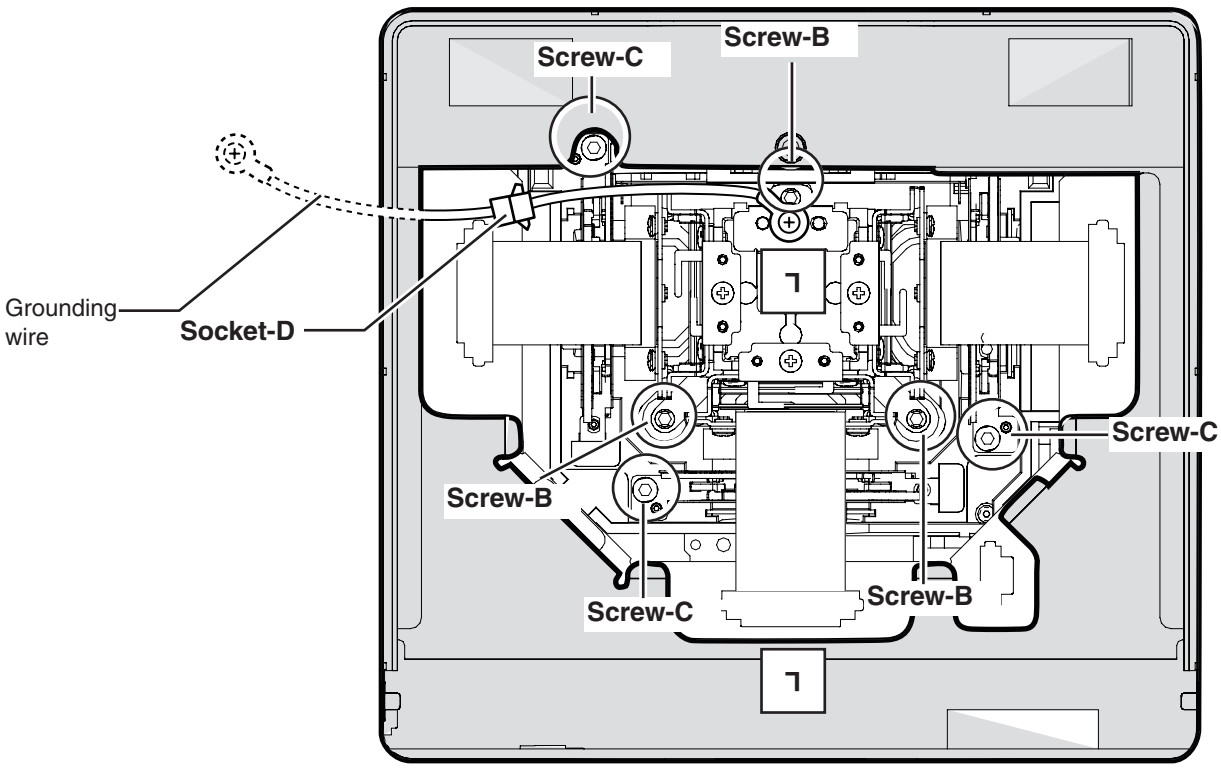


Quick maintenance

This projector provides a prism cover on the cabinet top to enhance the service maintenance. This enables service personnel to align the optical adjustment or replace the optical parts without disassembly the cabinet top.

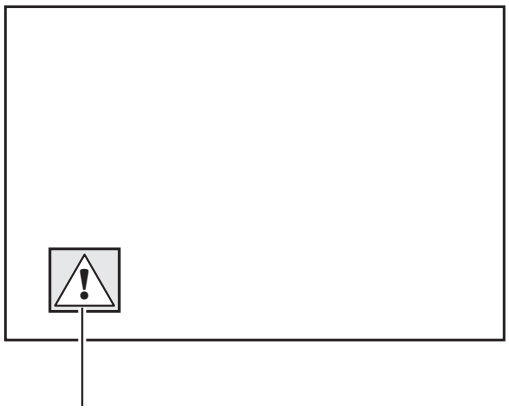
1. Loosen 1 screw-A and open the prism cover panel.
2. To remove the LCD Panel/Prism ass'y, loosen 3 screws-B and disonnect a socket-D, and then pull the LCD Panel/ Prism ass'y up.
3. To remove the Optical filter ass'y, remove a screw-C on each stopper of the Optical filter ass'y and then pull the Optical filter ass'y up.





Prohibition of motor control

This projector provides a function to prohibit the operation of motors. After installing the projector and then setting up this function. You can protect the unexpected operation by the users. All the motor controls, Focus, Zoom and Lens-shift, will not be operated. The prohibition icon will appear on the screen when user presses any of the motor control buttons.



Setting up procedures

1. Enter the service mode.
2. Select Group no. "200" and Item no. "55". Change Data value from "0" (Not prohibited) to "1" (Prohibited). Now the motor control is prohibited.
3. Exit from the service mode.

To cancel the prohibition mode, set value to "0" in the step 2.

* How to enter the service mode and select the group, item and data value, see "Service Adjustment Menu Operation".

Cleaning

After long periods of use, dust and other particles will accumulate on the LCD panel, prism, mirror, polarized glass, lens, etc., causing the picture to darken or color to blur. If this occurs, clean the inside of optical unit.

Remove dust and other particles using air spray. If dirt cannot be removed by air spray, disassemble and clean the optical unit.

Cleaning with air spray

1. Remove the cabinet top following to “Mechanical Disassemblies”.
2. Clean up the LCD panel and polarizing plate by using the air spray from the cabinet top opening.

Caution:
Use a commercial (inert gas) air spray designed for cleaning camera and computer equipment. Use a resin-based nozzle only. Be vary careful not to damage optical parts with the nozzle tip. Never use any kind of cleanser on the unit. Also, never use abrasive materials on the unit as this may cause irreparable damage.

Disassembly Cleaning

Disassembly cleaning method should only be performed when the unit is considerable dirty and cannot be sufficiently cleaned by air spraying alone.
Be sure to readjust the optical system after performing disassembly cleaning.

1. Remove the cabinet top and main units following to “Mechanical Disassemblies”.
2. Remove the optical base top following to “Optical Unit Disassemblies”. If the LCD panel needs cleaning, remove the LCD panel unit following to “LCD panel replacement”.
3. Clean the optical parts with a soft cloth. Clean extremely dirty areas using a cloth moistened with alcohol.

Caution:
The surface of the optical components consists of multiple dielectric layers with varying degrees of refraction. Never use organic solvents (thinner, etc.) or any kind of cleanser on these components.
Since the LCD panel is equipped with an electronic circuit, never use any liquids (water, etc.) to clean the unit. Use of liquid may cause the unit to malfunction.

Security Function Notice

This projector provides security functions such as "Key lock", "PIN code lock" and "Logo PIN code lock". When the projector has set these security function on, you are required to enter correct PIN code to use the projector. If you do not know the correct PIN code to the projector, the projector can no longer be operated or started. In this case, you must reset those function first according to the resetting procedure described below and then check up on the projector.

Function	Description
Key lock	Locks operation of the top control or the remote control. If the Key lock is enabled with top control lock, the projector can no longer be started. *Initial setting: Key lock function is disabled*
PIN code lock	Prevents the projector from being operated by an unauthorized person. *Initial code: "1234"*
Logo PIN code lock	Prevents an unauthorized person for changing the start-up logo on the screen. *Initial code: "4321"*

Resetting procedure

1 Disconnect the AC power cord from the AC outlet.

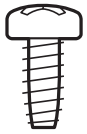
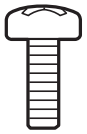
2 As pressing the **SELECT** button on the projector, connect the AC power cord into an AC outlet again. Keep pressing the **SELECT** button until the POWER indicator lights continuously.

This is complete the resetting of the security function. The PIN code lock and Logo PIN code lock are reset as the initial PIN code at the factory and the Key lock function is disabled.

Please refer to the owner's manual for further information of the security functions.

Mechanical Disassembly

Mechanical disassembly should be made following procedures in numerical order.
Following steps show the basic procedures, therefore unnecessary step may be ignored.
Caution:
The parts and screws should be placed exactly the same position as the original otherwise it may cause loss of performance and product safety.
The wiring method of the leads and ferrite cores should be returned exactly the same state as the original, otherwise it may cause lose of performance and product safety.

Screws Expression (Type Diameter x Length) mm	
T type	M Type
	

1-1 Cabinet top ass'y removal-1.

1. Remove 1 cover-A and 2 covers-B.

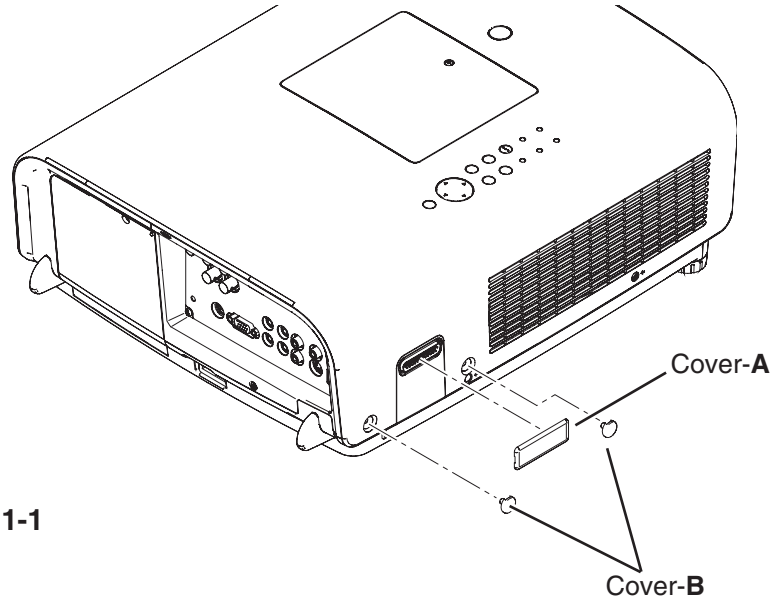


Fig. 1-1

1-2 Cabinet top ass'y removal-2.

1. Loosen 1 screw-A(M3X11) and open the Lamp cover.
2.Remove 1 screw-B(M3X8).

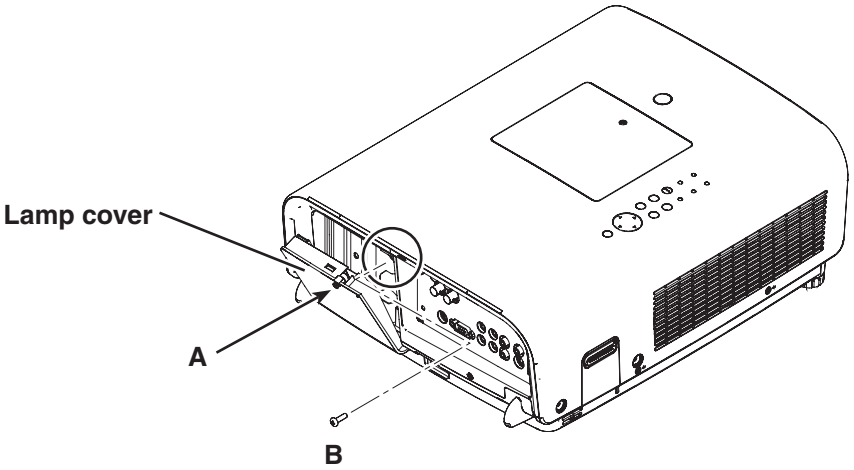


Fig. 1-2

1-3 Cabinet top ass'y removal-3.

1. Remove 6 screws-A(M3X8) and remove the Cabinet top ass'y.

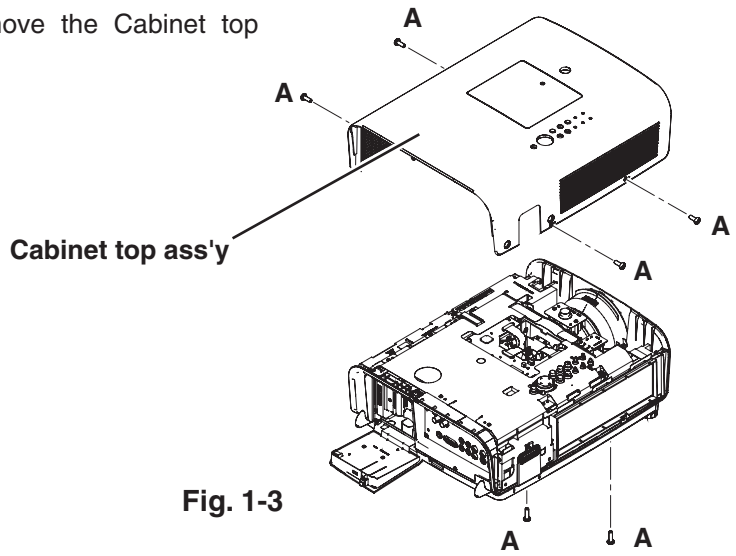


Fig. 1-3

1-4 Cabinet top ass'y removal-4.

1. Loosen screw-A(M3X11) and open the Prism cover panel.
   (Press 2 places (unhook) and remove the Prism cover panel upward.)
2. Remove 4 screws-B(T3X8) and remove the shield plate.

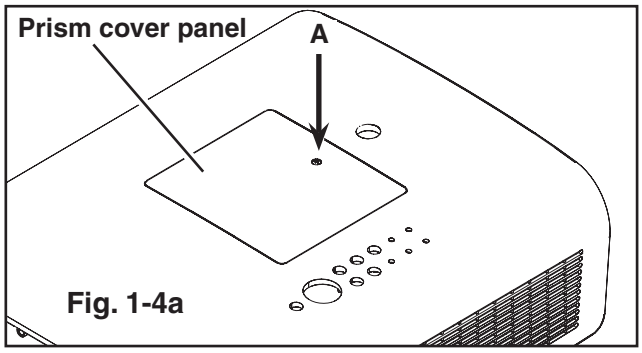


Fig. 1-4a

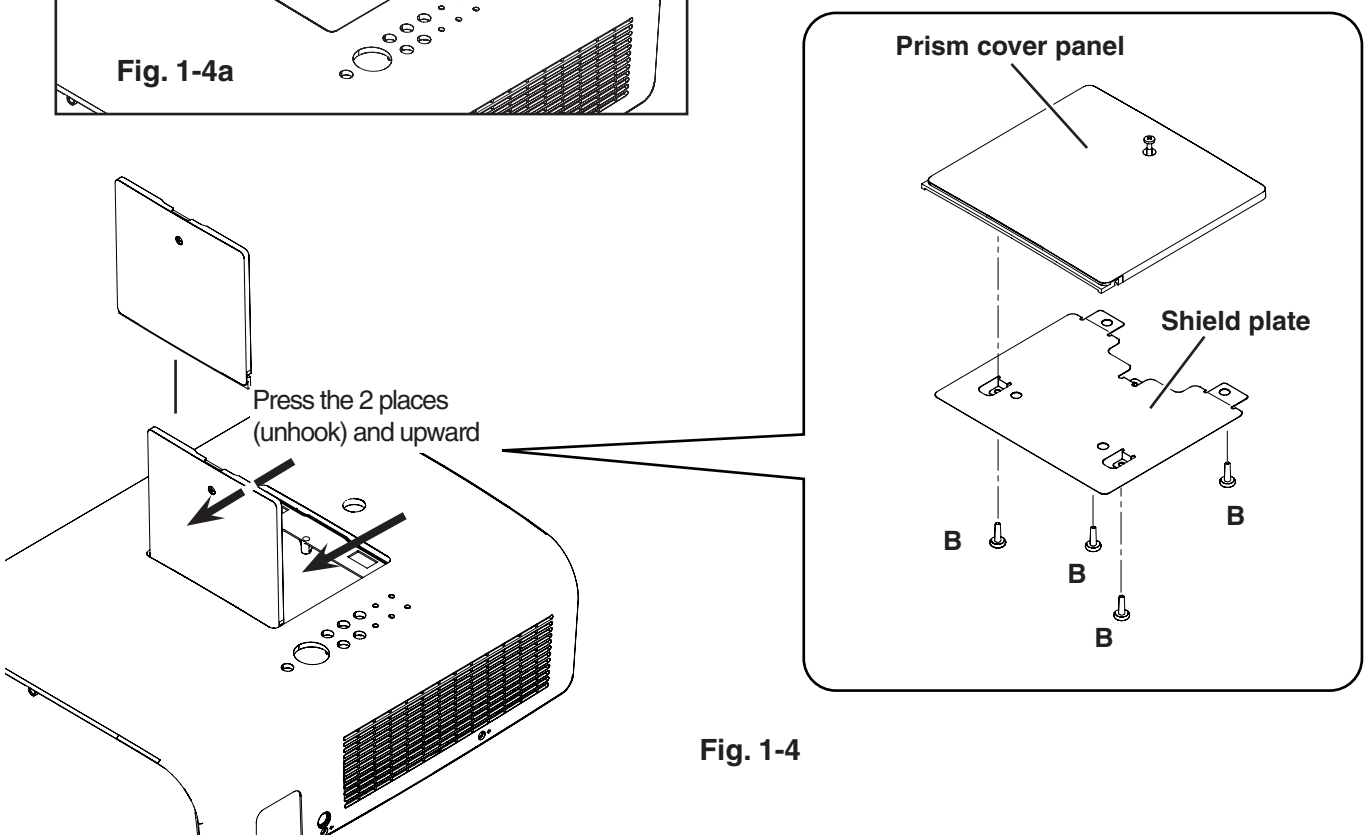


Fig. 1-4

2 AV Panel and Side Panel removal.

1. Remove 5 screws-A(M3X8) and remove the AV Panel.
2. Remove 1 screw-B(M3X6) and remove the Side Panel.

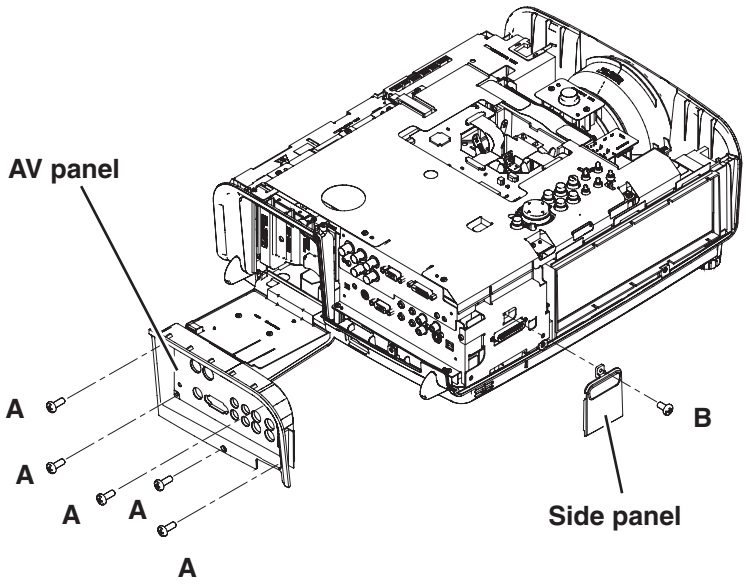


Fig. 2

3 Shield plate top-A removal.

1. Remove 11 screws-A(M3X8) and remove the Shield plate top-A.

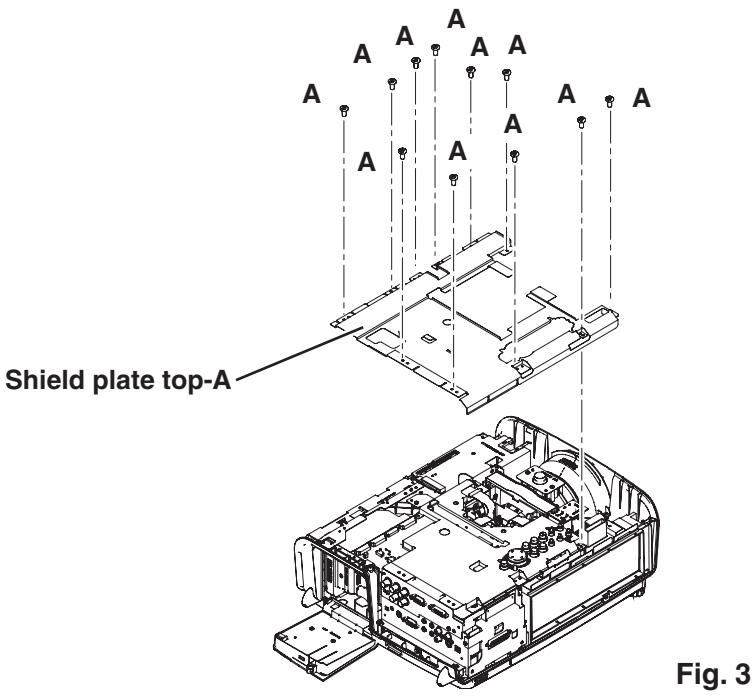


Fig. 3

4-1 Main board ass'y removal-1.

1. Remove 3 screws-A(M3X6) and remove 2 screws-B(M3X6).
2. Remove the Shield plate top-B, Main board ass'y.

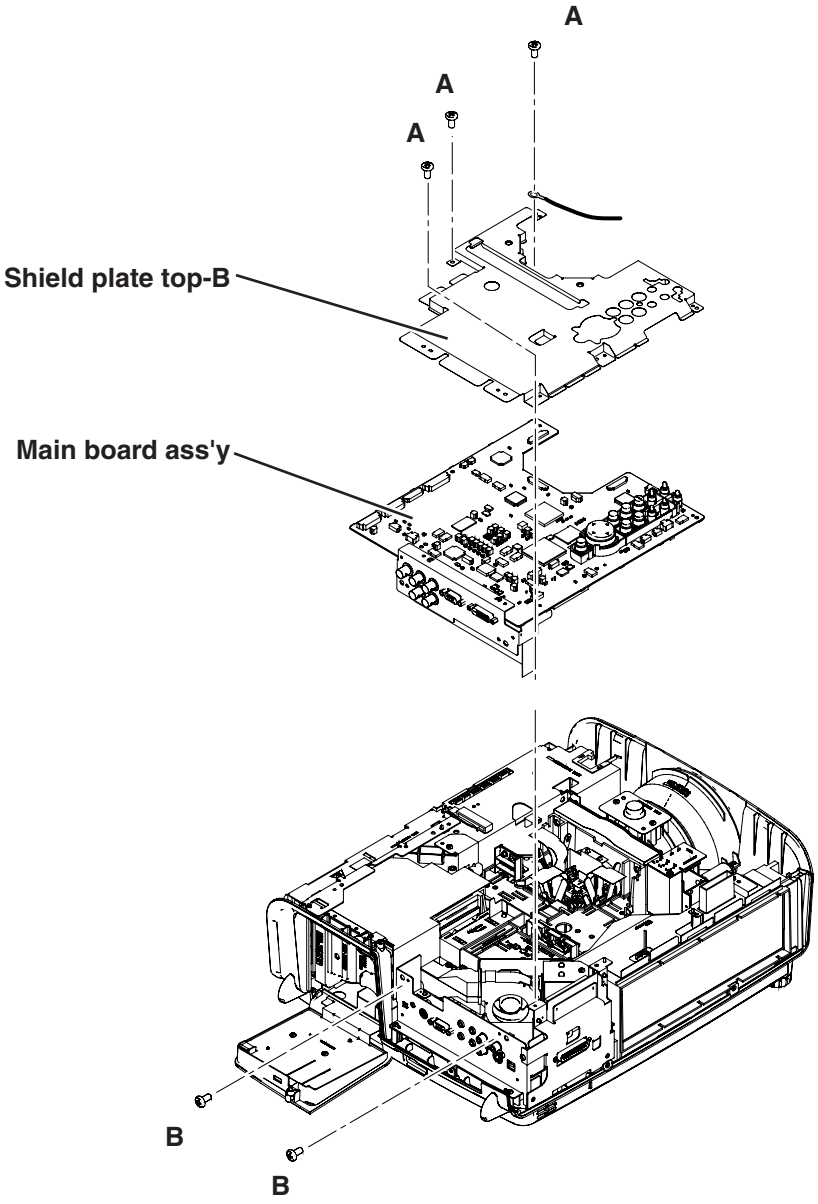


Fig. 4-1

4-2 Main board ass'y removal-2.

1. Unhook and remove the Button upward.
2. Remove the DEC inlay.

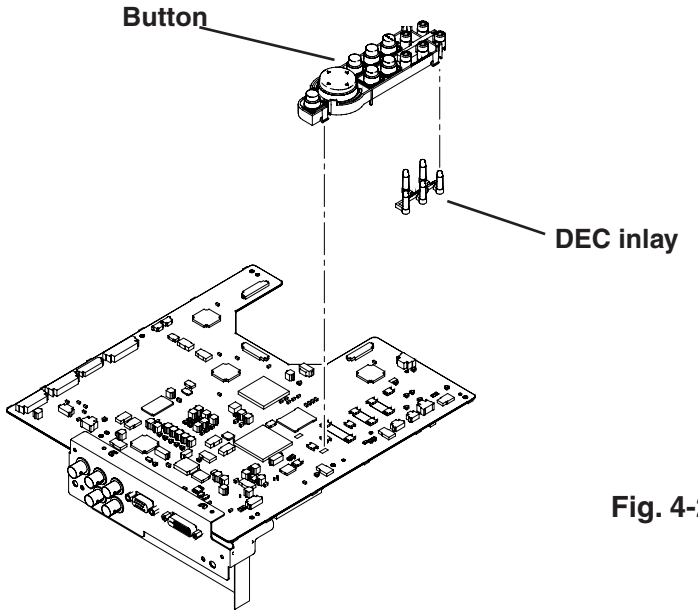


Fig. 4-2

4-3 Main board ass'y removal-3.

1. Remove 1 screw-A(M3X6).
2. Remove 2 nuts-B, 2 nuts-C, 1 screw-D and remove the Main PWB Holder and Shield plate bottom.

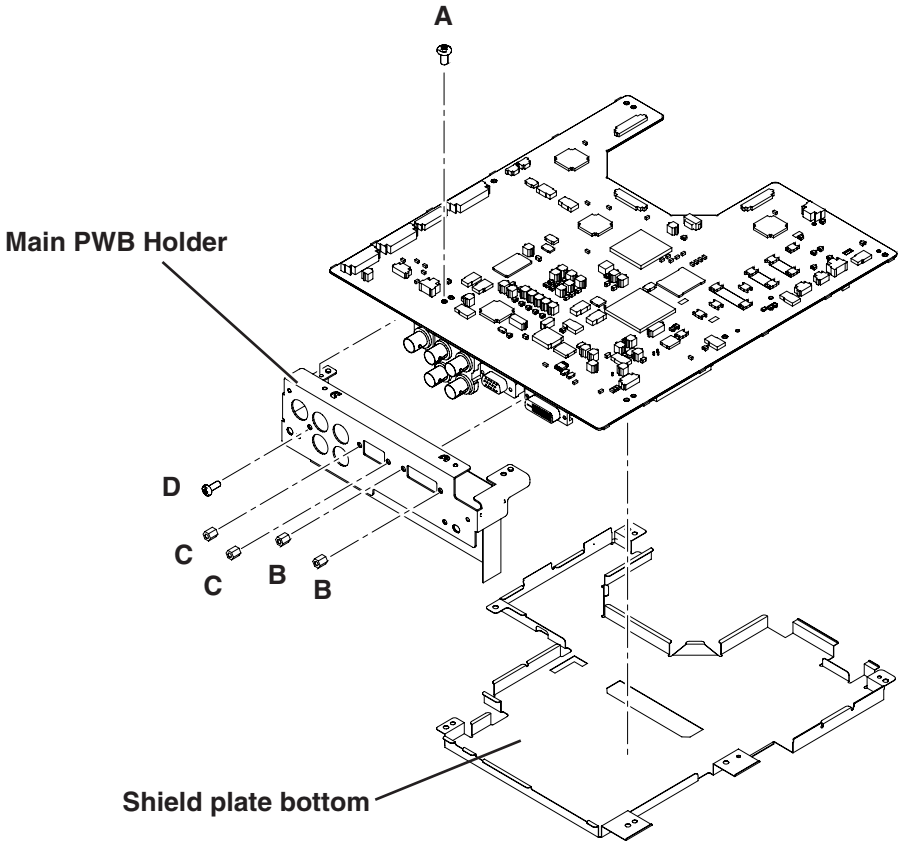
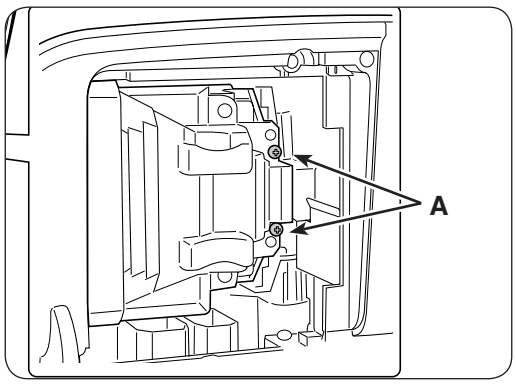


Fig. 4-3

5 Lamp ass'y removal.

1. Loosen 2 screws-A(M3X13) and remove the Lamp ass'y.
2. Remove the Spacer sheet.



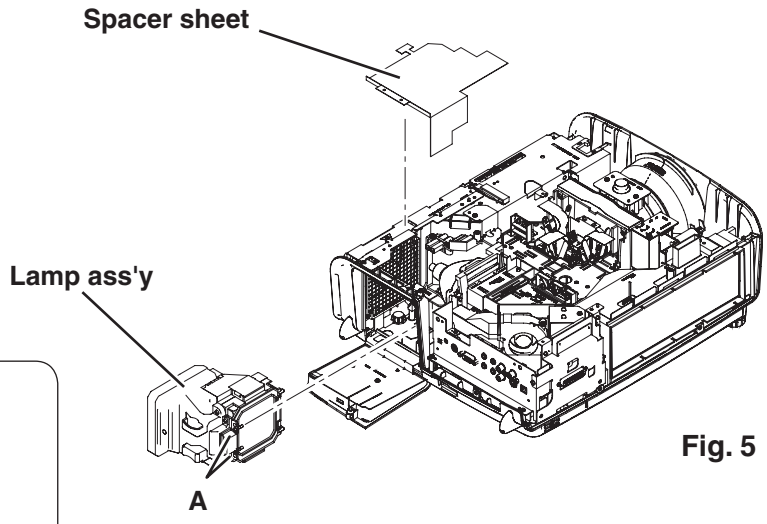


Fig. 5

6-1 Lens cover ass'y removal-1.

1. Remove 4 screws-A(T3X8) and remove the Lens cover ass'y.

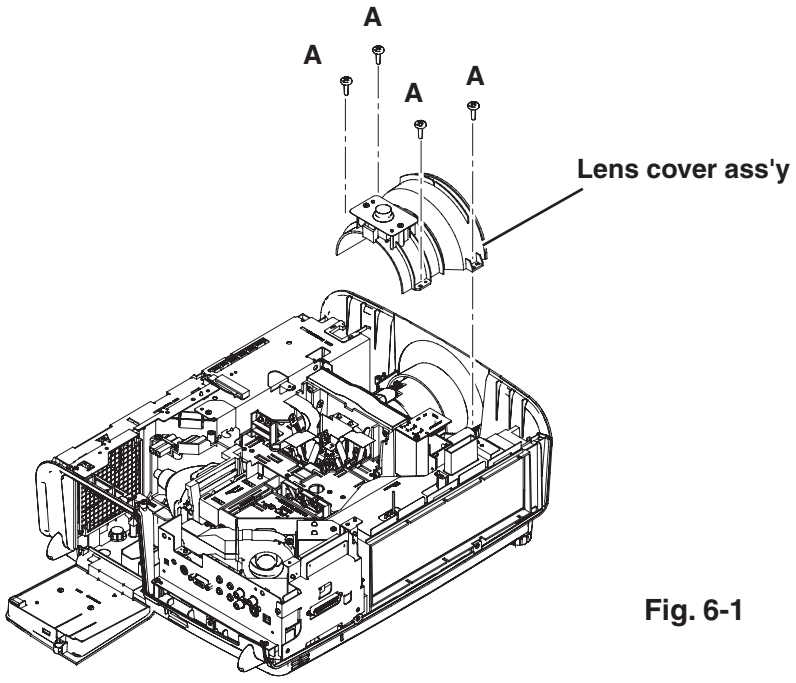


Fig. 6-1

6-2 Lens cover ass'y removal-2.

1. Remove 2 screws-A(T3X8) and remove the Stopper button.
2. Remove the Button, remove the Spring and remove the Holder.

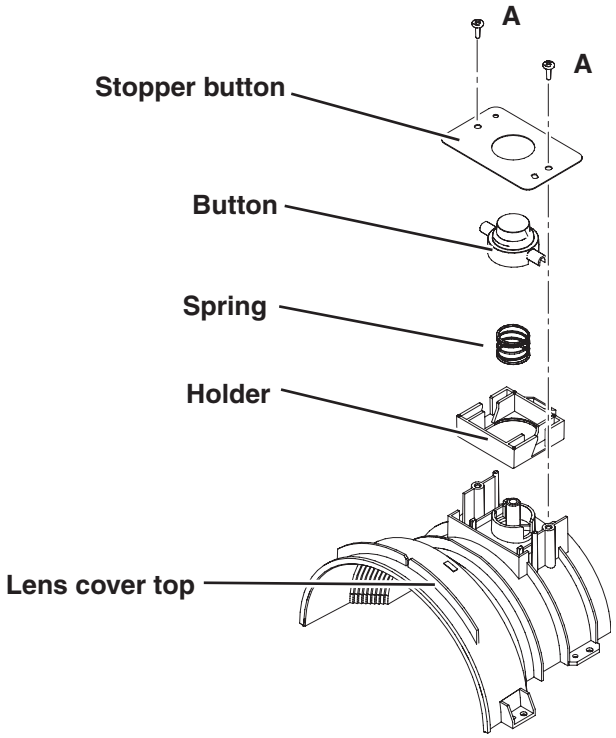


Fig. 6-2

7 Optical engine removal.

1. Remove 5 screws-A(T3X10) and remove the Optical engine.

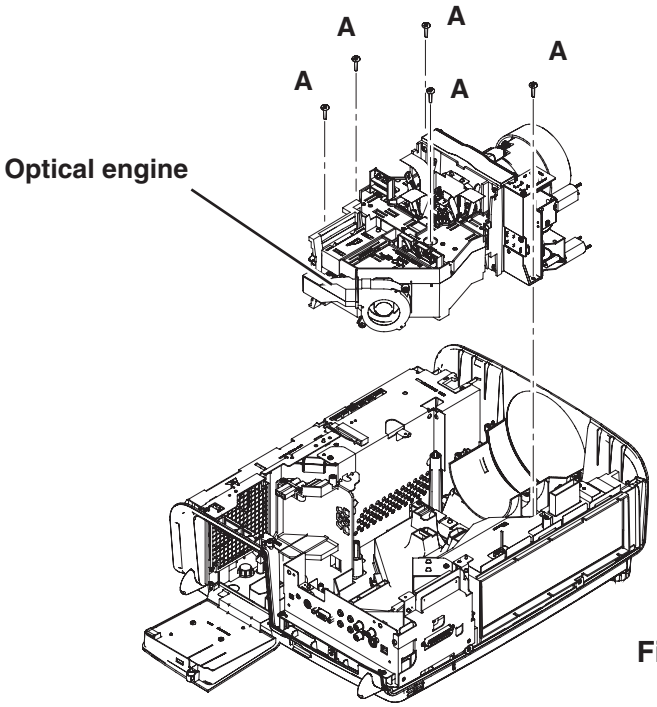


Fig. 7

8 Lens cover bottom removal.

1. Remove 2 screws-A(T3X8) and remove the Optical engine.

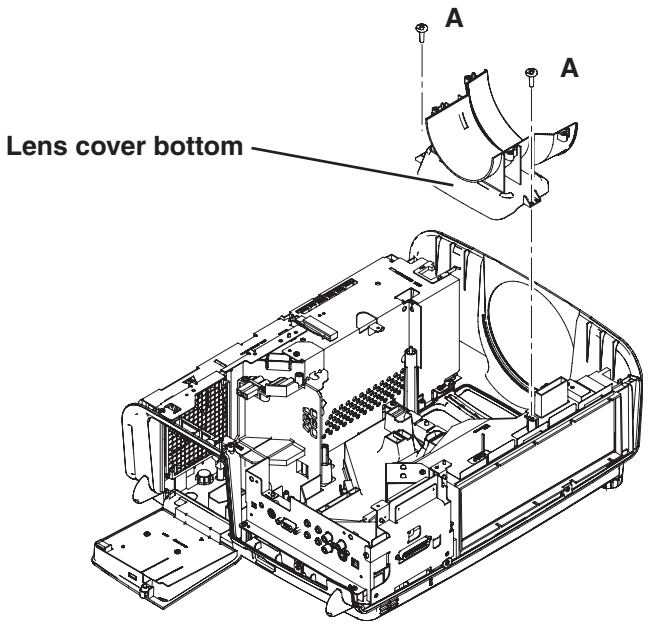


Fig. 8

9-1 AV board & Network joint board ass'y removal-1.

1. Remove 3 screws-A(T3X8) and remove the AV board & Netwark joint board ass'y.

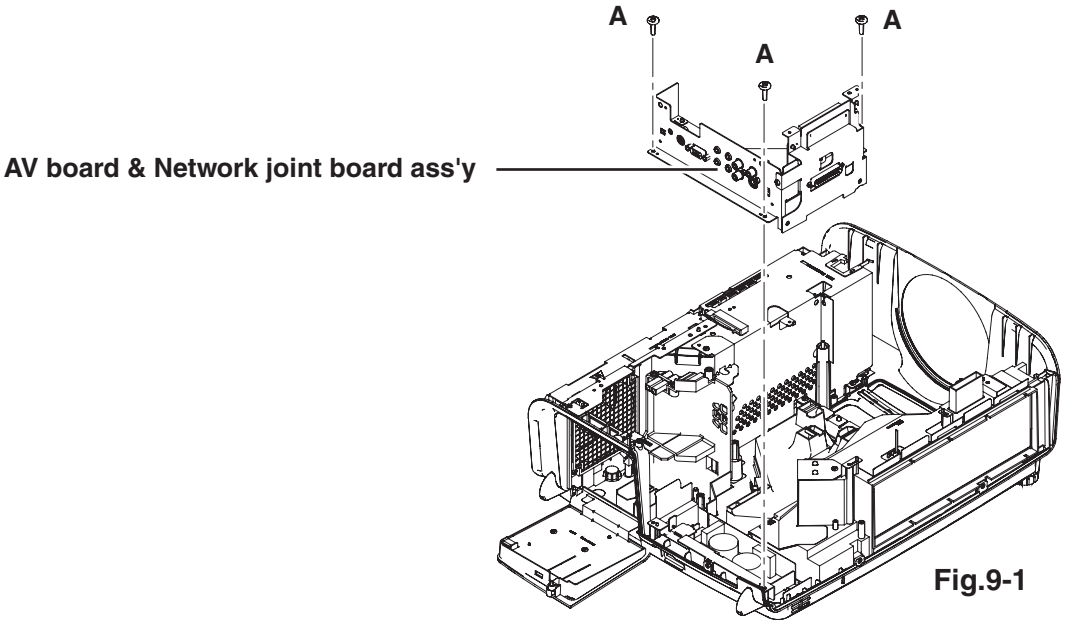


Fig.9-1

9-2 AV board & Network joint board ass'y removal-2.

1. Remove 3 screws-A(M3X6), 4 screws-B(T3x8), 2 screws-C(M2.6X10) and 2 screws-D(T3x8) and 2 nuts-E.
2. Remove the AV board ass'y and remove the Network joint board ass'y.

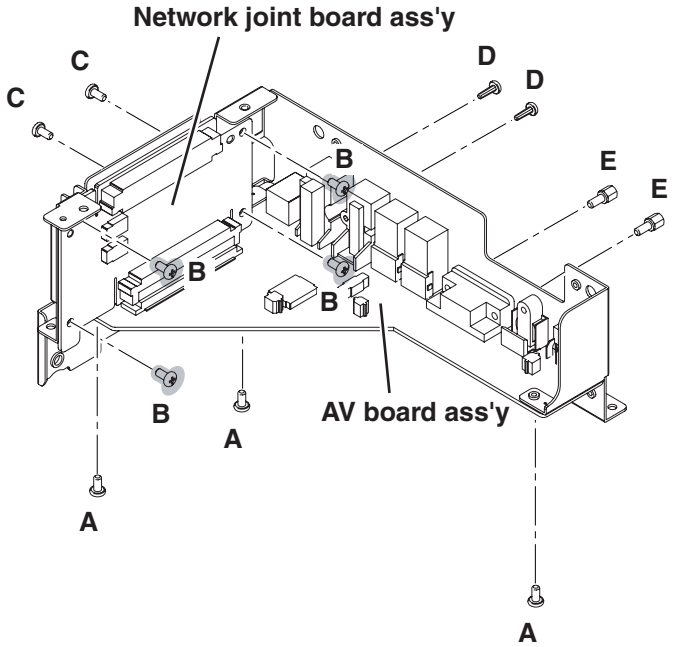


Fig.9-2

10-1 Thermostat(SW901) ass'y removal-1.

1. Remove 1 screw-A(M3X6) and remove the Thermostat(SW901) ass'y.

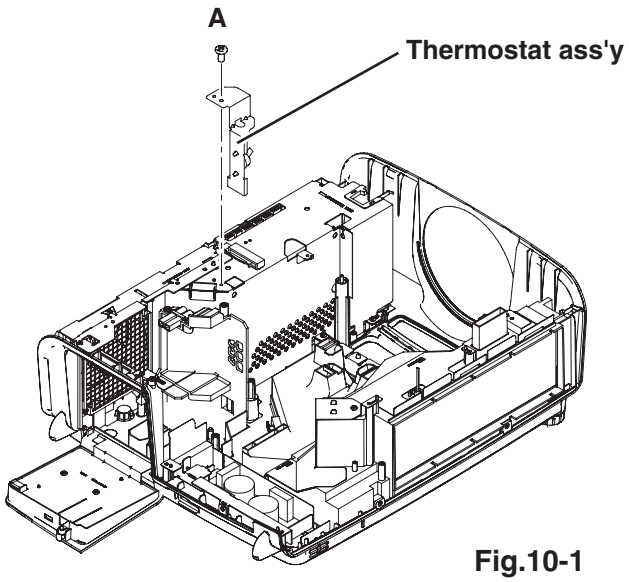


Fig.10-1

10-2 Thermostat(SW901) ass'y removal-2.

1. Remove 2 screws-A(M3X4) and remove the Thermal switch(SW901).

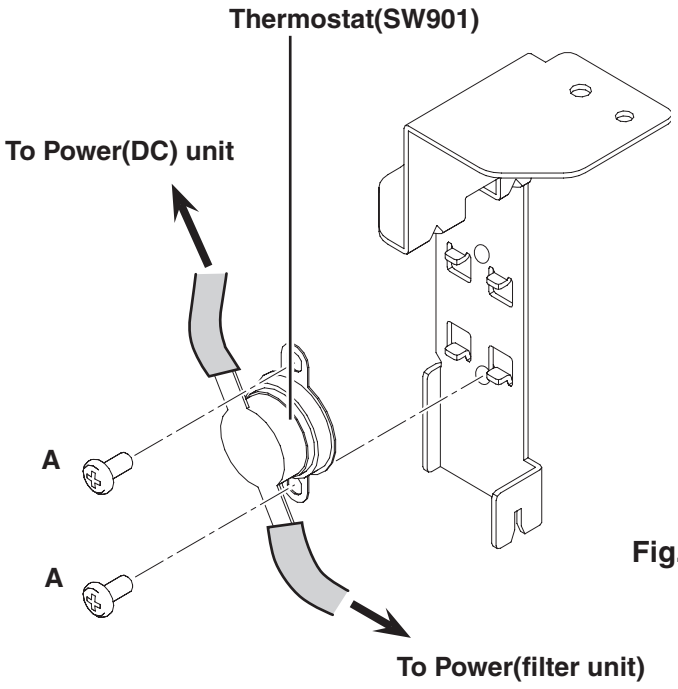


Fig.10-2

11-1 Exhaust Fan(FN901, FN902) ass'y removal-1.

1. Remove 2 screws-A(T3X8) and remove the Exhaust Fan(FN901, FN902) ass'y.

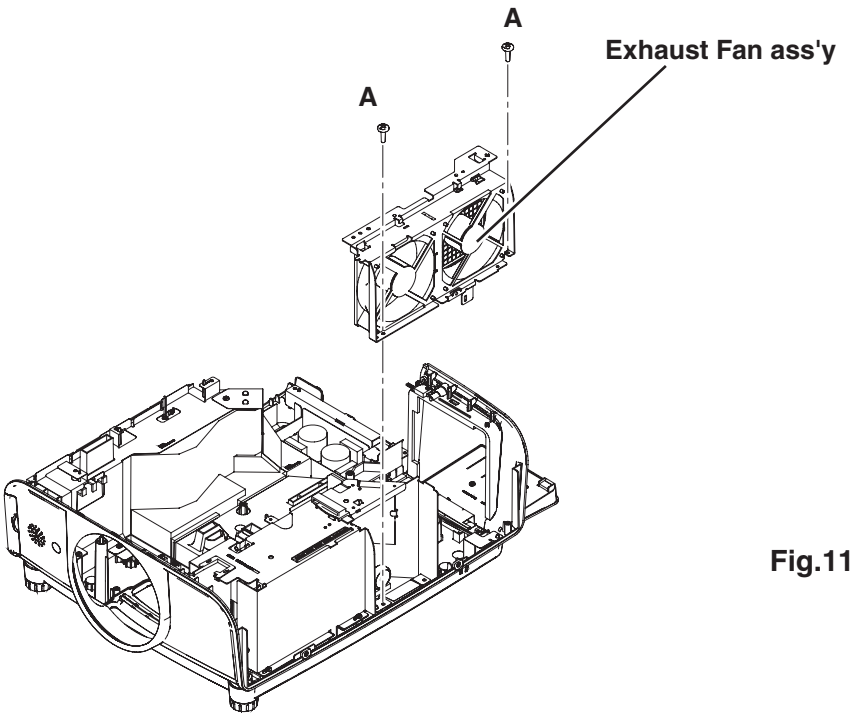


Fig.11-1

11-2 Exhaust Fan(FN901, FN902) ass'y removal-2.

1. Remove 4 screws-A(M3X28), remove the Fan guard cover and the Fan(FN901).
2. Remove 4 screws-B(M3X28) and remove the Fan(FN902).

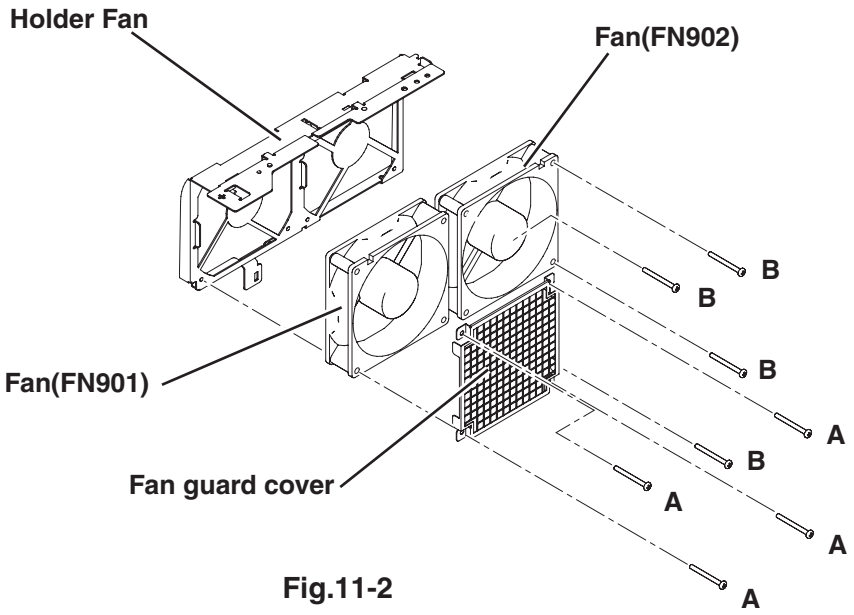


Fig.11-2

12 Exhaust Fan duct removal.

1. Remove 2 screws-A(T3X6) and remove the Lamp ballast connector.
2. Remove 2 screws-B(T3X10) and remove Exhaust Fan duct.

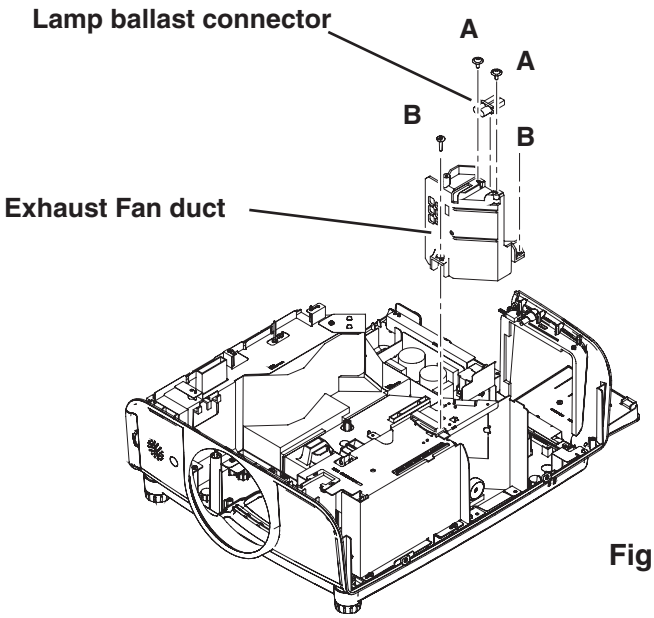


Fig.12

13-1 Power board(Ballast) ass'y removal-1.

1. Remove 1 screw-A(M3X6), 4 screws-B(T3X8) and remove the Power board(Ballast) ass'y.

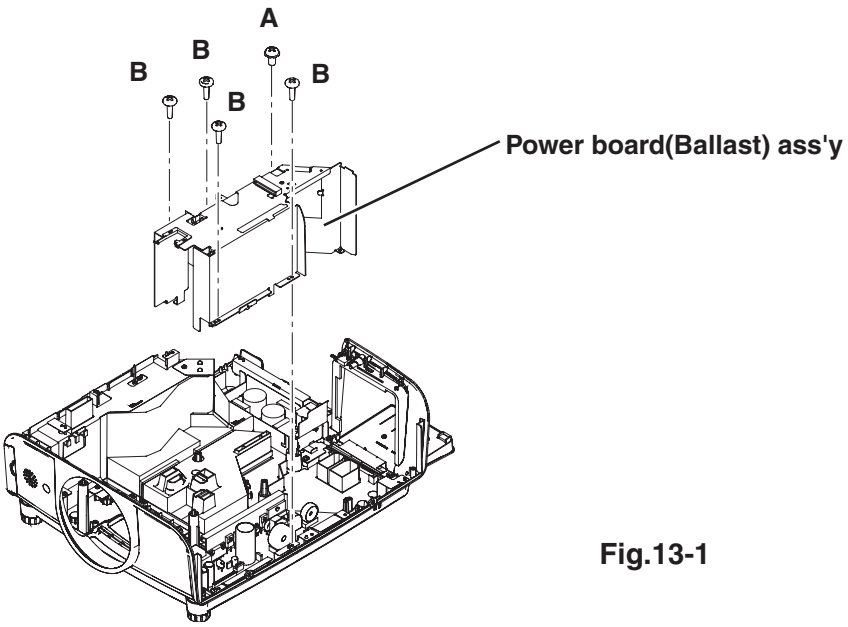


Fig.13-1

13-2 Power board(Ballast) ass'y removal-2.

1. Remove the 2 rivets A and B, and take off the trigger box. (Press the edge of the rivet-A and remove the rivets)
2. Remove 2 Fixer clamp and remove the Power board(Ballast).
3. Remove the Spacer sheet.

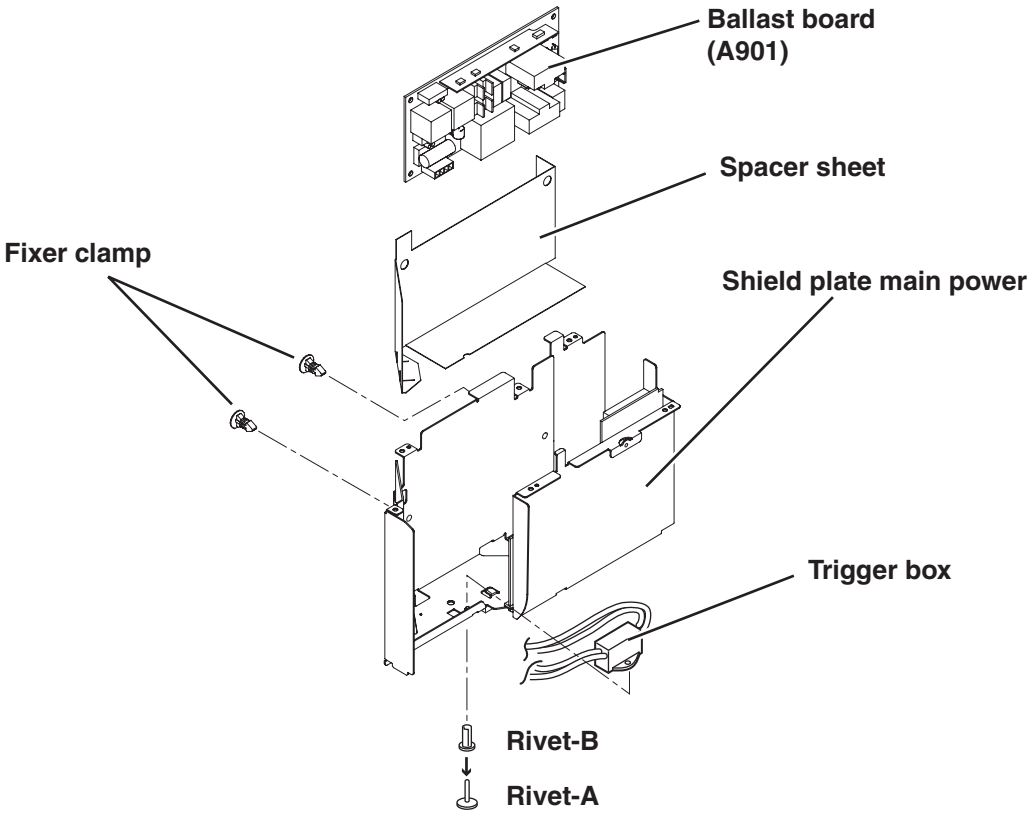


Fig.13-2

14 Power board ass'y removal.

1. Remove 1 screw-A(M3X8), 3 screws-B(T3X8) and remove the Power board ass'y.
2. Remove the Spacer sheet.

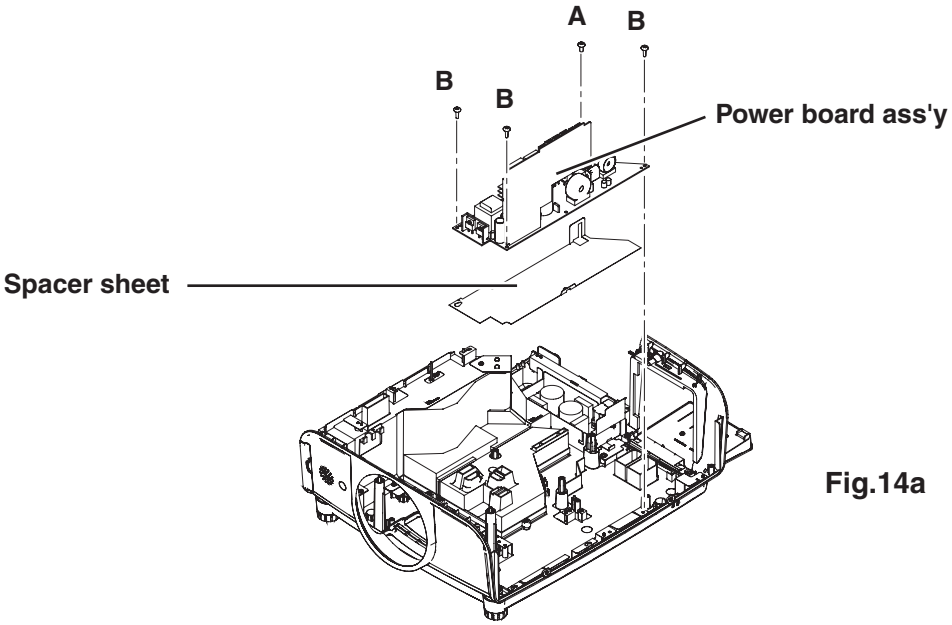


Fig.14a

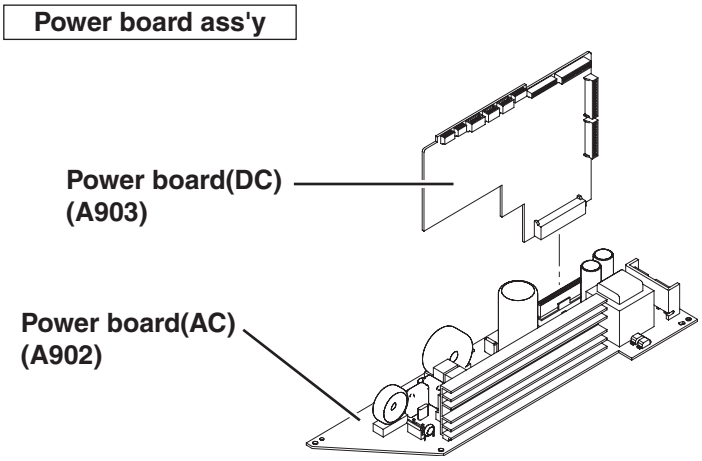


Fig.14b

15-1 Power board(Filter) ass'y removal-1.

1. Remove 1 screw-A(M3X6), 2 screws-B(T3X8) and remove the Power board(Filter) ass'y.

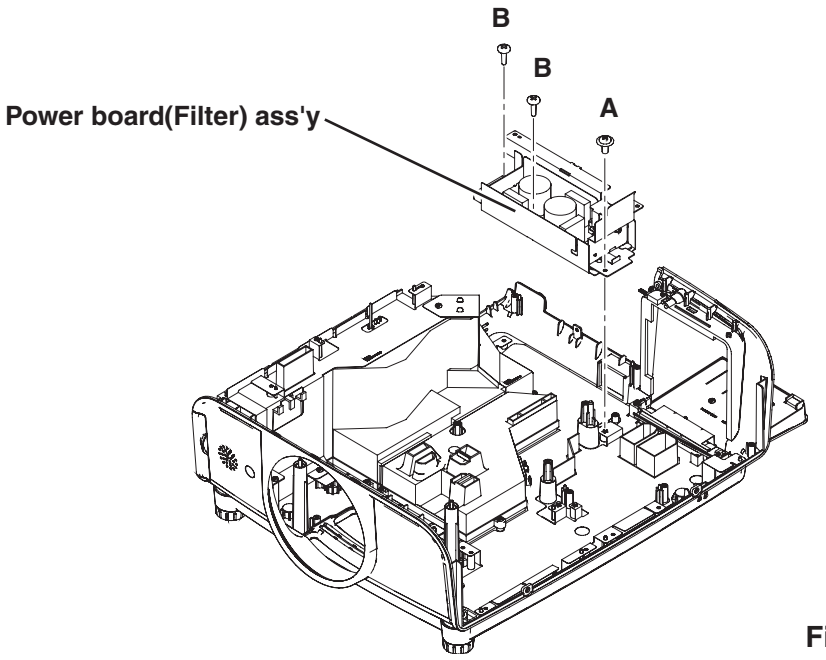


Fig.15-1

15-2 Power board(Filter) ass'y removal-2.

1. Remove 1 screw-A(M2.5X5) and remove the Fuse cover.
2. Remove the Holder PWB, remove the Spacer sheet and remove the Power board(Filter).

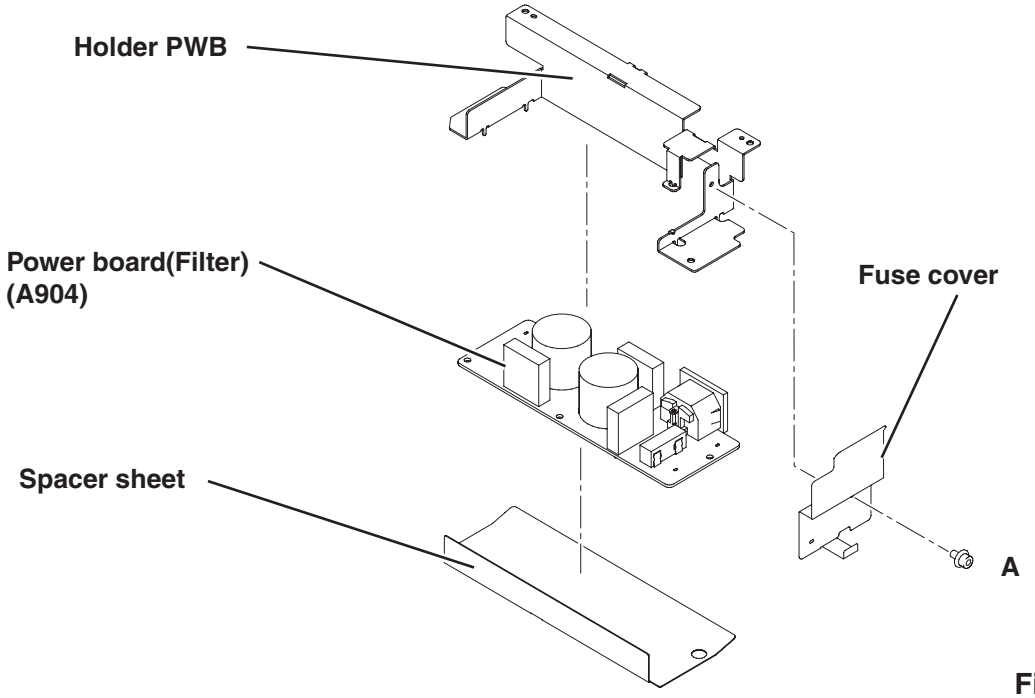


Fig.15-2

16-1 Intake Fan(FN904,FN905)removal-1.

1. Pull out air filter base ass'y.
2. Remove 5 screws-A(T3X8) and remove the intake duct ass'y.

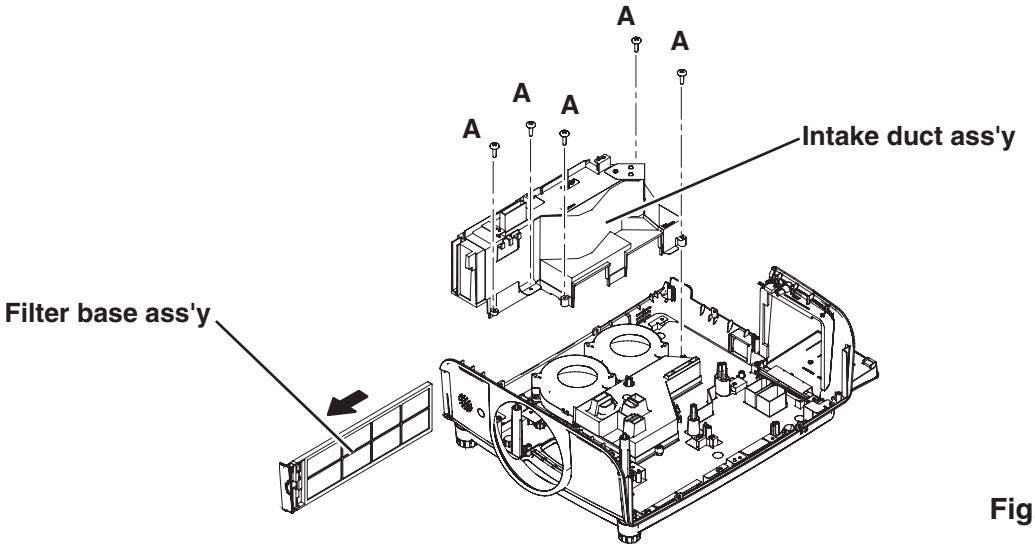


Fig.16-1

16-2 Intake Fan(FN904,FN905)removal-2.

1. Remove 1 screw-A(M3X6) and remove Shield plate-A, B and C.

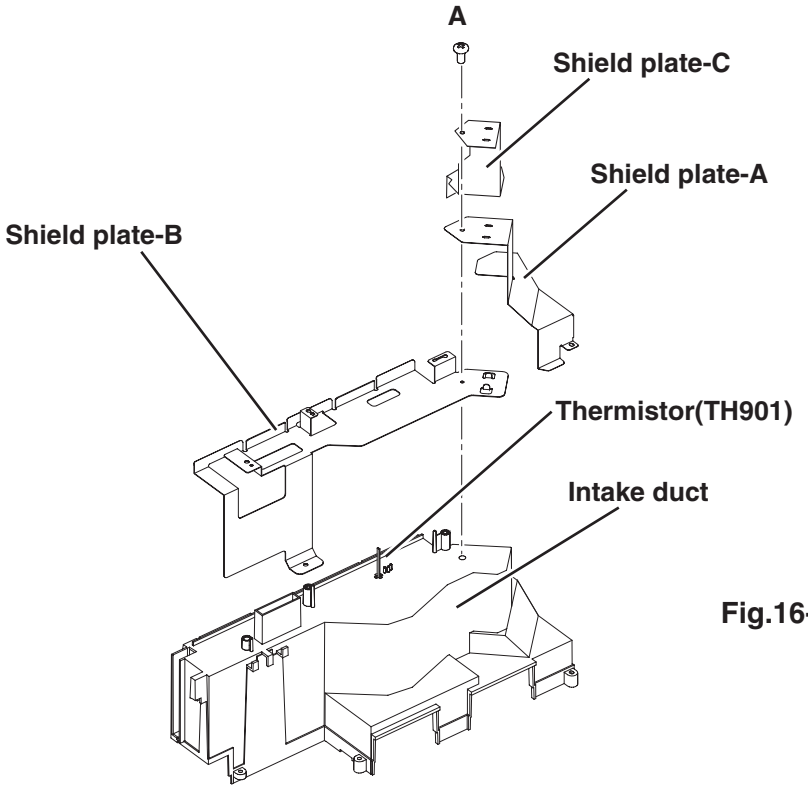


Fig.16-2

16-3 Intake Fan(FN904,FN905)removal-3.

1. Remove 4 screws-A(T3X8) and remove the Panel duct.
2. Remove 2 screws-B(T3X10) and remove the Fan(FN904).
2. Remove 2 screws-C(T3X10) and remove the Fan(FN905).

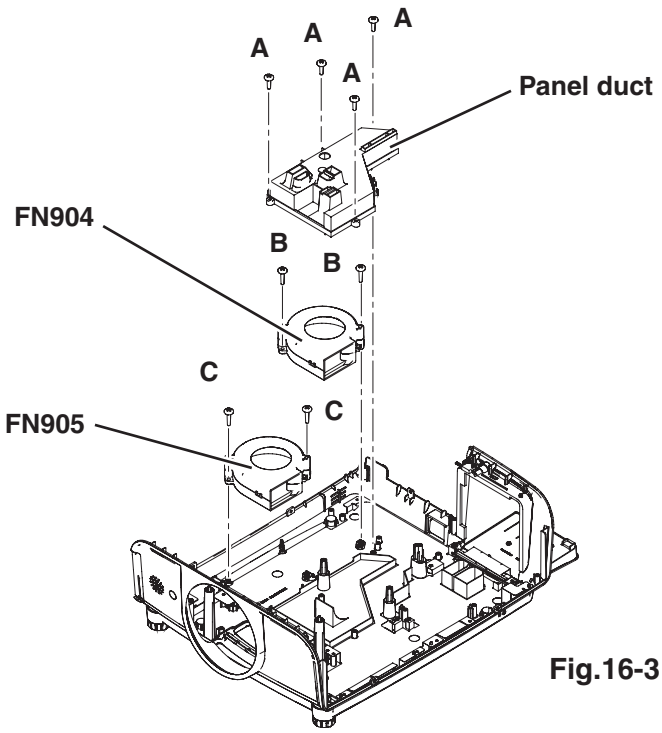


Fig.16-3

17 Shield plate BTM removal.

1. Remove 2 screws-A(T3X8) and remove the Shield plate BTM.
2. Remove the Lamp cover ass'y.

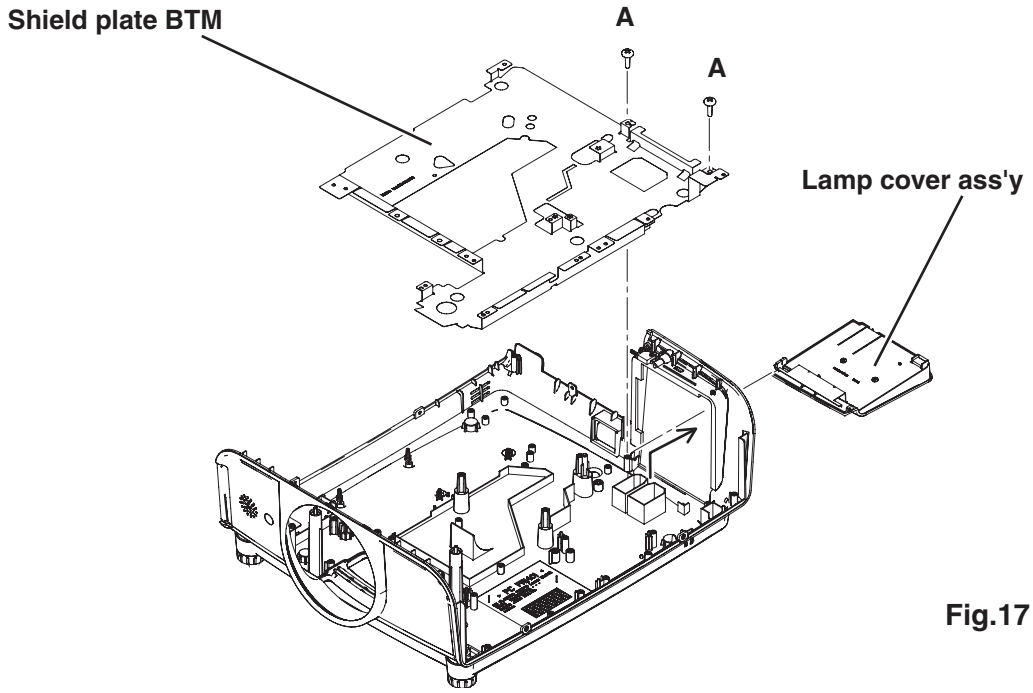


Fig.17

18 Lamp cover ass'y disassemblies.

1. Remove 2 screws-A(T3X8) and remove the Shield plate.

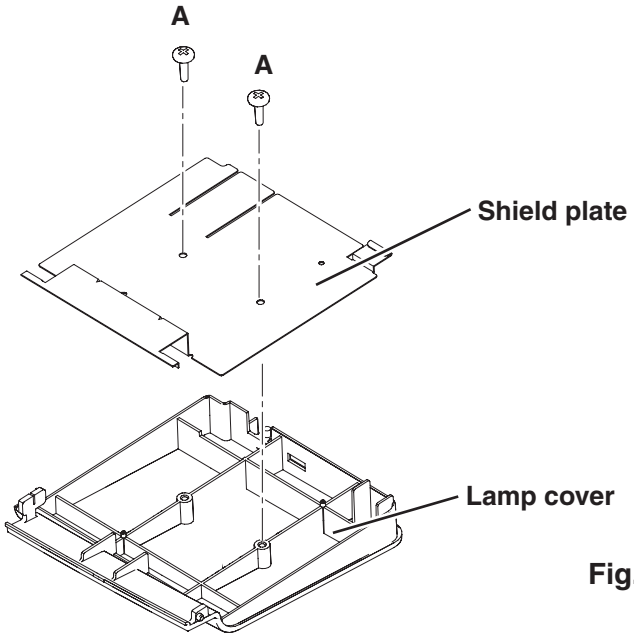


Fig.18

19 Lamp cover switch and R/C Front board removal.

1. Remove 1 screw-A(T3X8) and remove the R/C Front board(A2850).
2. Remove 1 screw-B(T3X12) and remove the Lamp cover switch(SW902).
3. Remove the Speaker(SP901) upward.

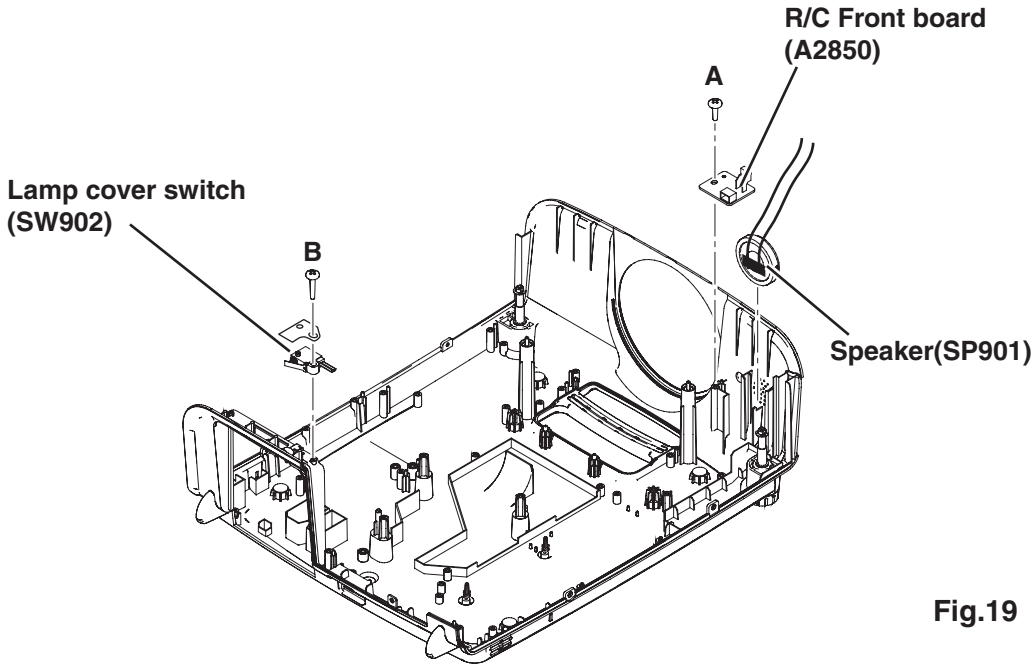
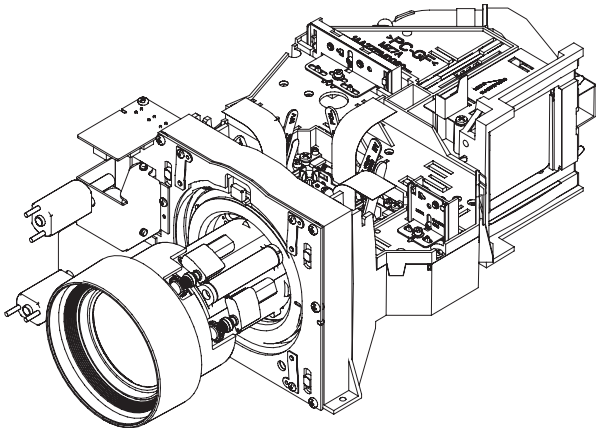


Fig.19



20 **Projection lens removal.**

1. Press and hold the Fixing lever-A and turn the Projection lens counterclockwise (about 1/6 turn) and then take it off.

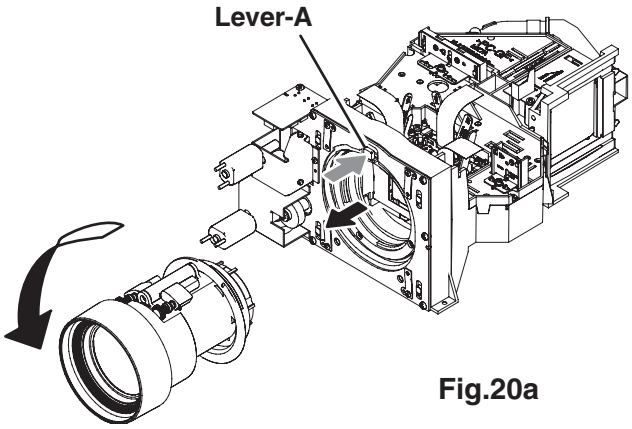


Fig.20a

Note in the Mounting Projection Lens

Insert the Projection lens into the guide at a position where the both markers on the projection lens and the mounting base come together, and turn it clockwise until the Fixing Lever is set to the fixing position.

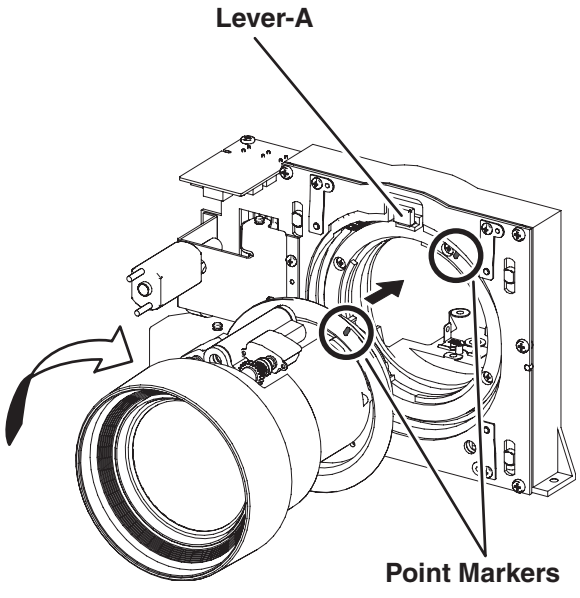


Fig.20b

21-1 LCD panel/Prism ass'y removal

1. Loosen 3 screws-A(M2.5X10.2) and disconnect 1 socket-C of grounding wire, and then remove the LCD panel/Prism ass'y.

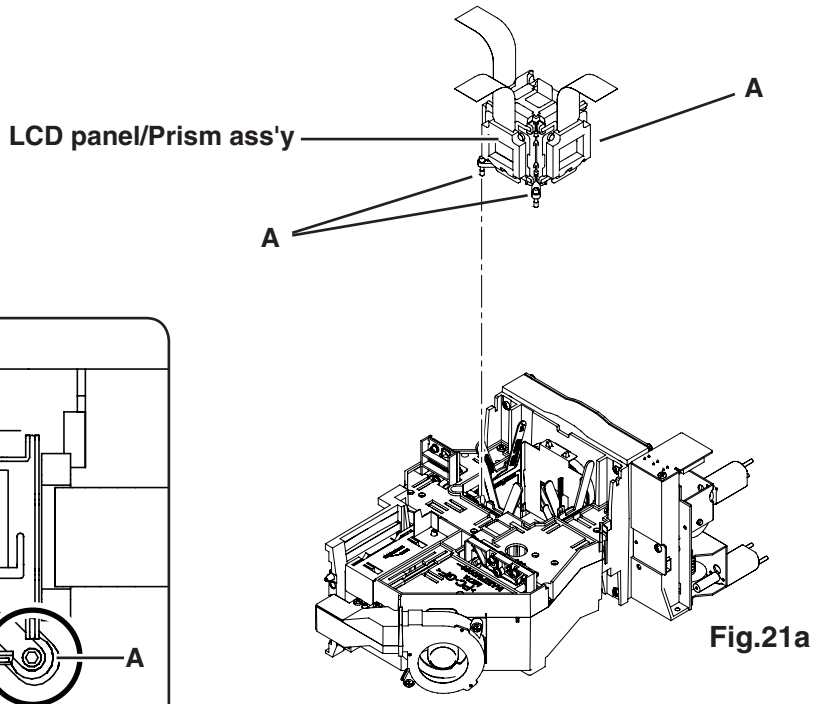


Fig.21a

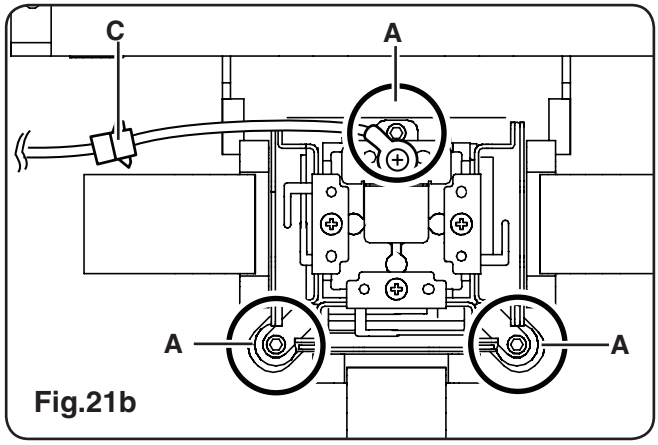


Fig.21b

Note; Do not replace the LCD panel separately otherwise it cannot obtain proper picture. Do not touch the prism, the LCD panel and electrode of flexible cable.

IMPORTANT NOTICE on LCD Panel/Prism Ass'y Replacement

LCD panels used for this model cannot be replaced separately. Do not disassemble the LCD Panel/Prism Ass'y. These LCD panels are installed with precision at the factory. When replacing the LCD panel, should be replaced whole of the LCD panels and prism ass'y at once.

After replacing LCD Panel/Prism ass'y, please check the following points.

- Check that there is no color shading at the top, bottom, left or right of the screen. If there is, try to remove the shading following to the chapter "Optical Adjustment".
- Check the white balance. If it needs the adjustment, adjust the white balance following to the "White Balance Adjustment" and "Common Centre Adjustment" in the chapter "Electrical Adjustment".
- Check the white uniformity on the screen.
  If you find the color shading at the some part of the screen, it needs to take the color shading adjustment. This adjustment should be performed by a computer and it also requires a special software "Projector Service Tool". The software will be supplied separately and can be ordered as follows;

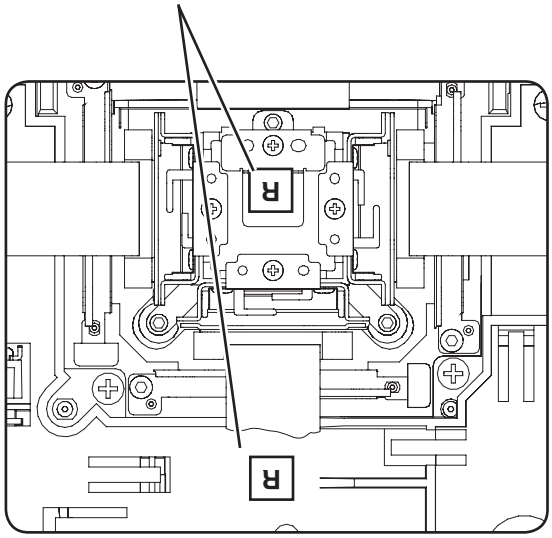
PROJECTOR SERVICE TOOL Ver. 4.11
Service Parts No. 610 340 8811

LCD Panel Type Check

There are 2 types combination of the LCD panel/prism assembly and the optical unit, named Type-R and Type-L. Since both have no compatibility, each type should be combined with the same type, and the specific parts should be used. If not, the poor optical characteristics may degrade the quality of a projected image.
Confirm the "R" label or "L" label on top of the LCD panel/ prism assembly and the optical unit.

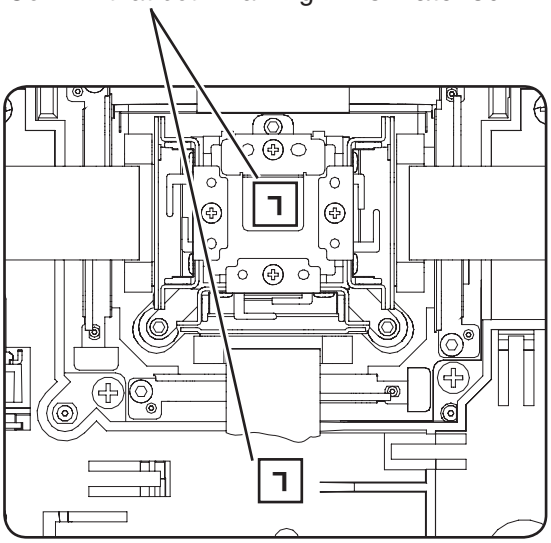
NOTE:
LCD panel/prism assembly should be used with the same type of the optical unit.

Confirm that both marking "R" is matched.



LCD Panel/Prism Ass'y Type-R

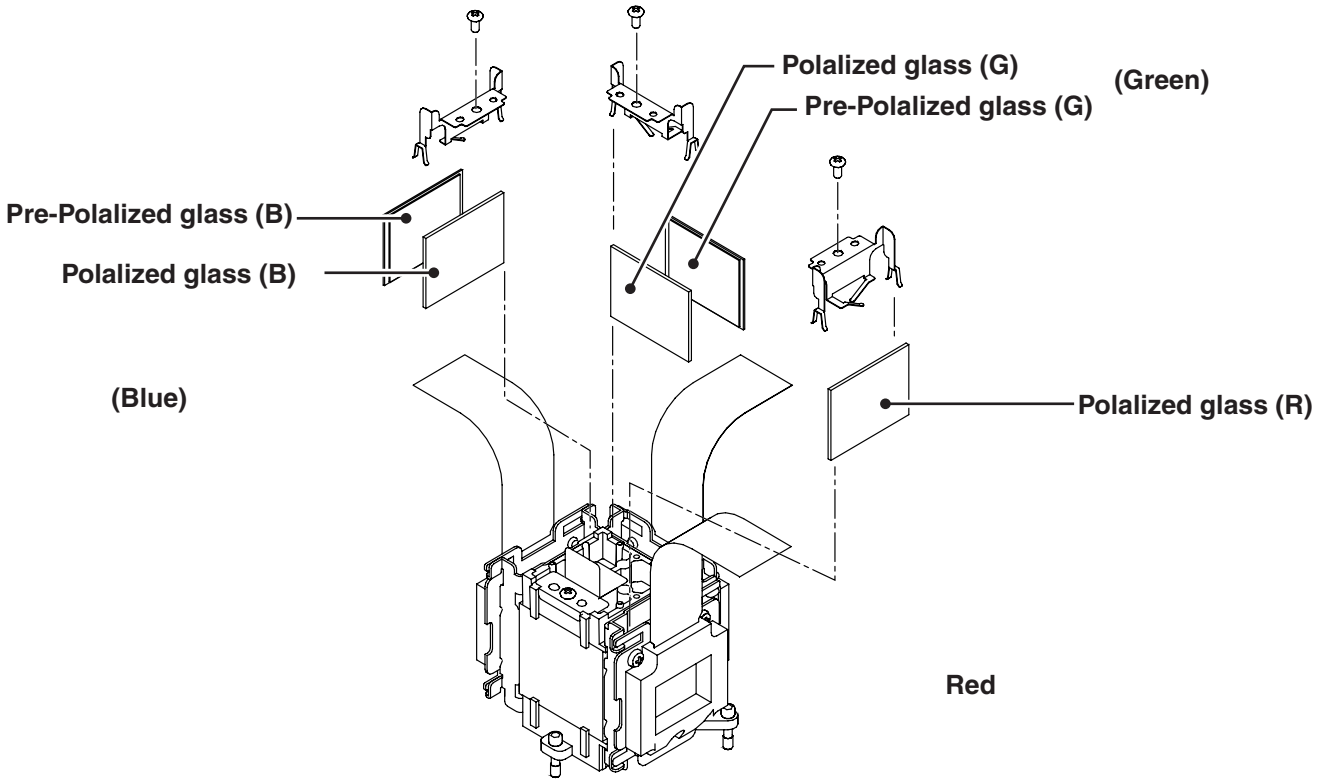
Confirm that both marking "L" is matched.



LCD Panel/Prism Ass'y Type-L

21-2 Polarized glass, Pre-Polarized glass removal

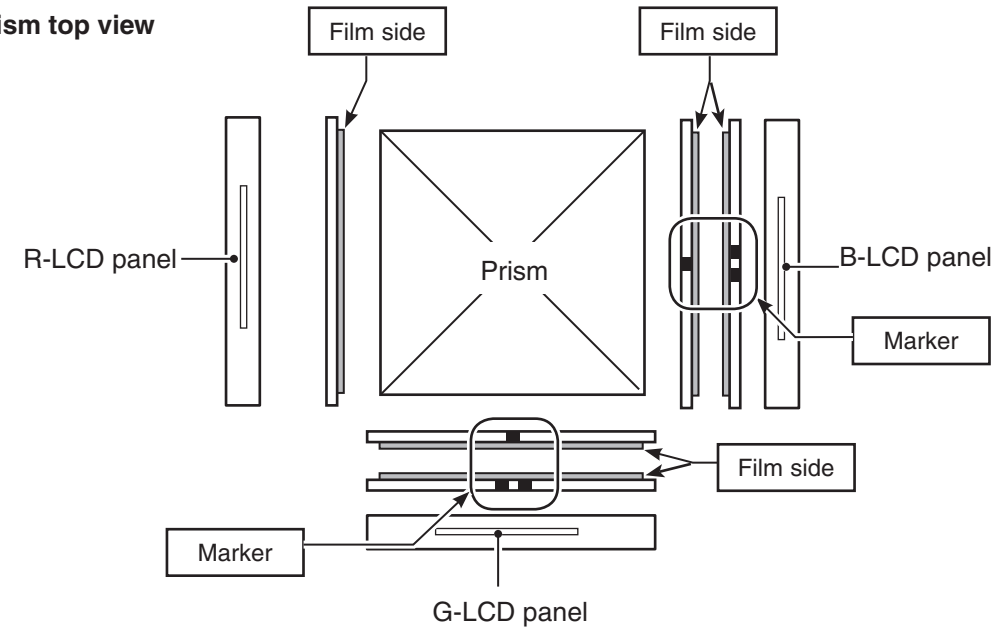
1. Remove each screw (M2X4) and holder.



Mounting direction

Mount the pre-polarized glasses and polarized glasses as shown in the figure below.

LCD panel/Prism top view



22 Lens mount removal.

1. Remove 4 screws-A(M2.5X10) and remove the Lens mount.

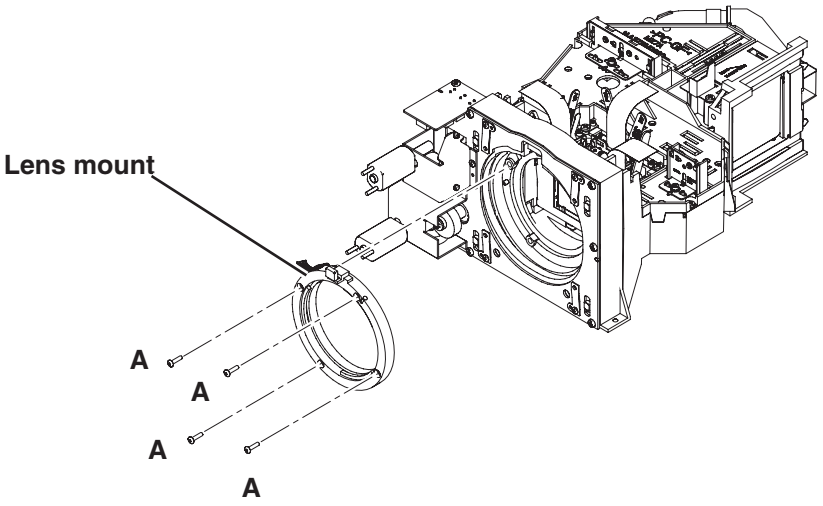


Fig.22

23 Lens shift ass'y removal.

1. Remove 4 screws-A(M3X6) and remove the Lens shift ass'y.

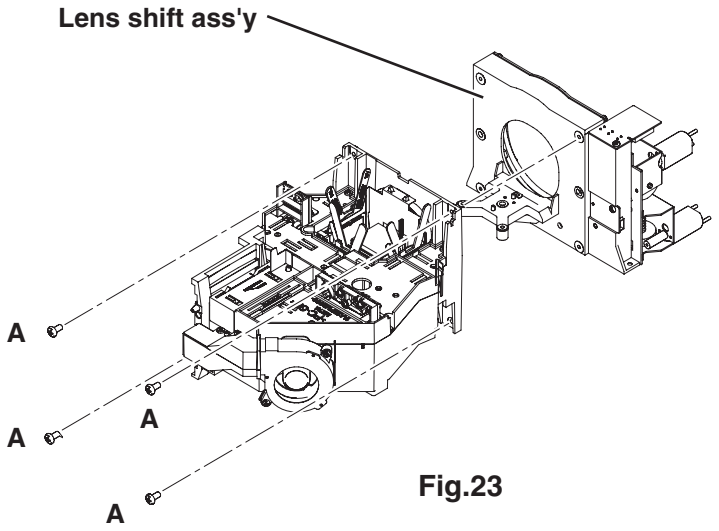


Fig.23

24 Condenser lens ass'y removal.

1. Remove 1 screw-A(M2.5X5) and remove the Condenser lens ass'y.
2. Remove 2 screws-B(M2.5X5) and remove the Lens holder ass'y.
3. Remove 1 screw-C(T3X6) and remove the Condenser lens.

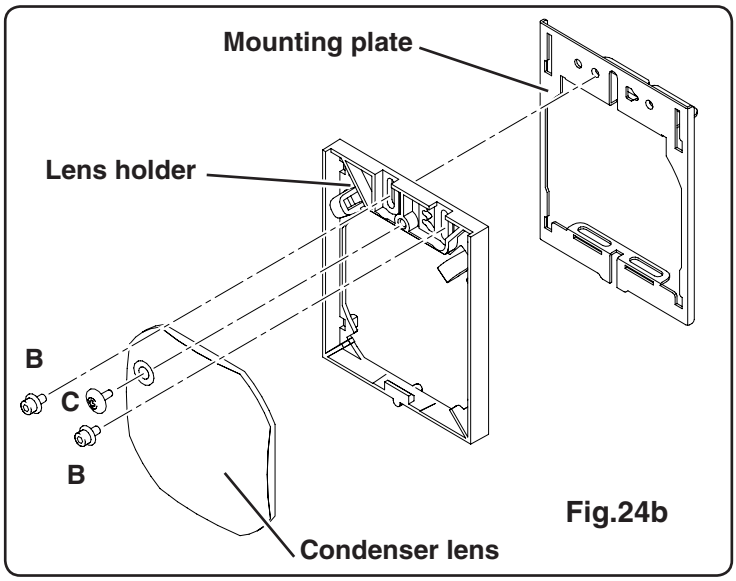


Fig.24b

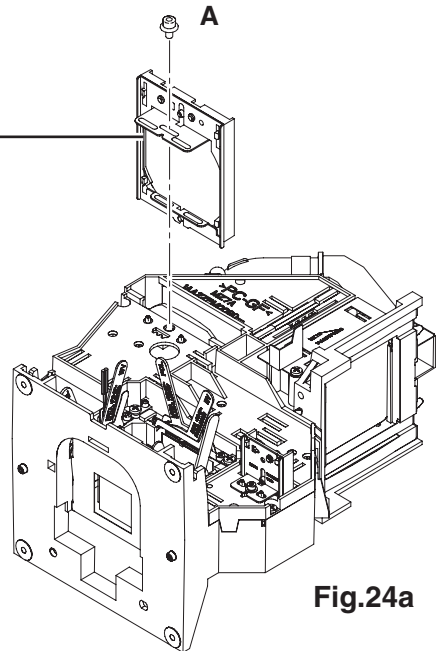


Fig.24a

Lens holder ass'y

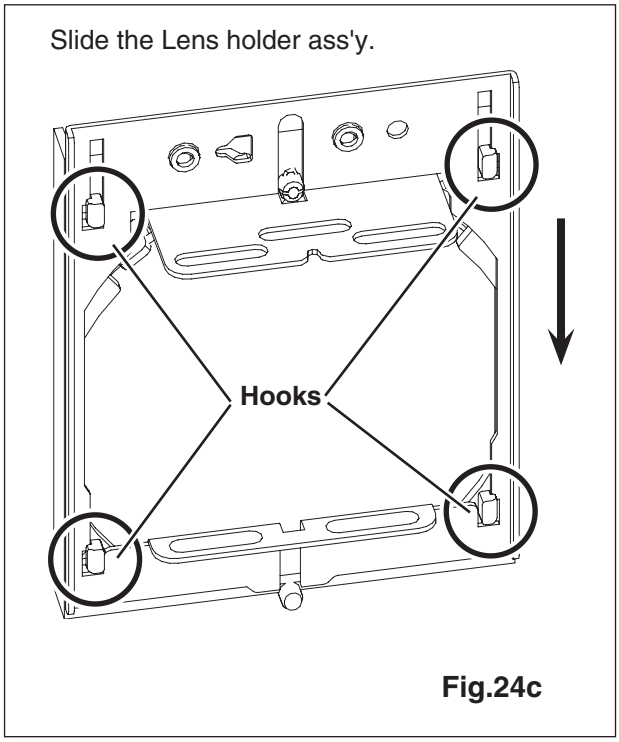


Fig.24c

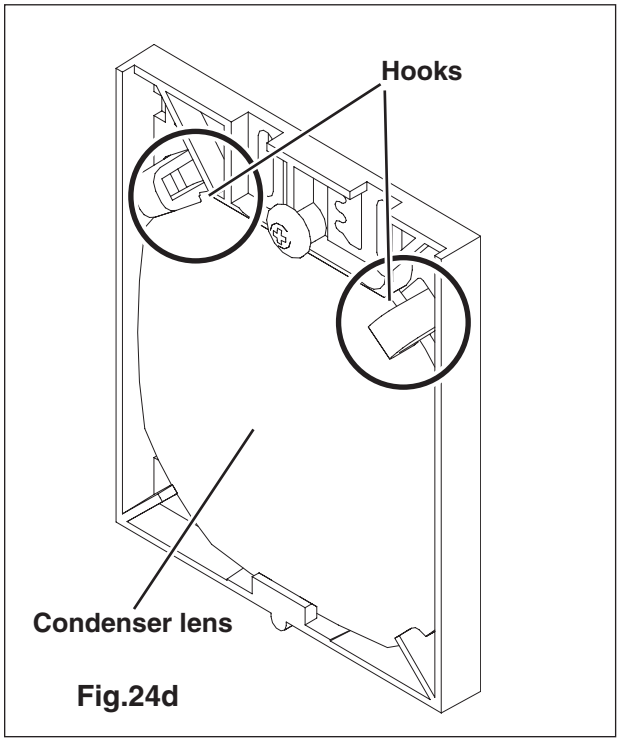


Fig.24d

25 Relay lens ass'y removal.

1. Remove 1 screw-A(M2.5X5) and remove the Relay lens ass'y.
2. Remove 1 screw-B(M2.5X5) and remove the Lens holder ass'y.
3. Remove 1 screw-C(T3X6) and remove the Relay lens.

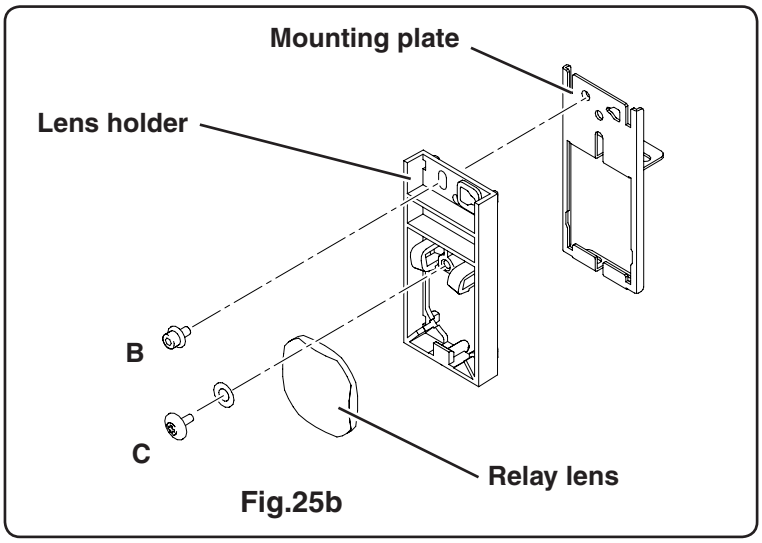


Fig.25b

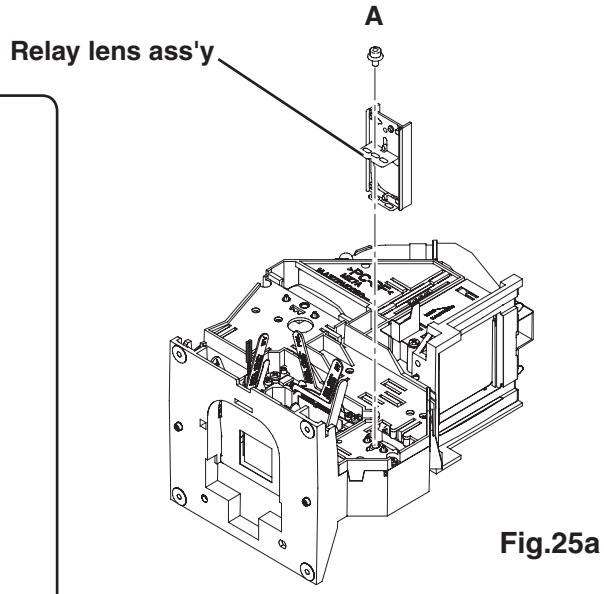


Fig.25a

Slide the Lens holder ass'y.

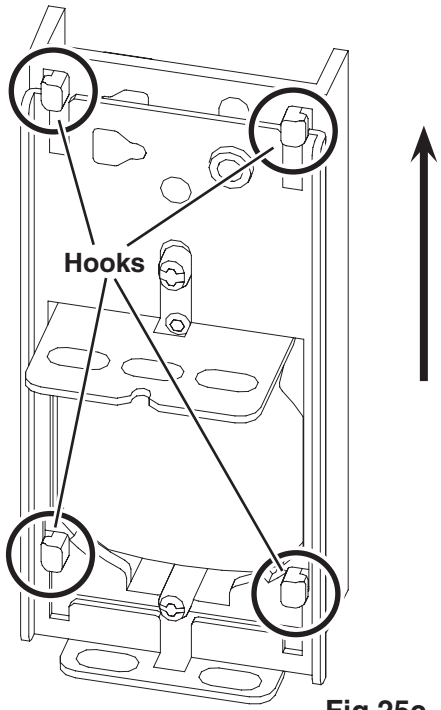


Fig.25c

Lens holder ass'y

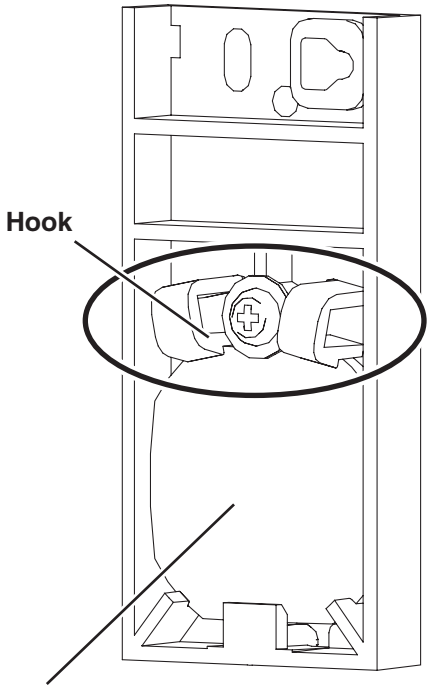


Fig.25d

26-1 Polarized glass ass'y and Optical filter ass'y removal.

1. Remove each 1 screw-A(M2.5X6) and remove the stopper.
2. Remove the Polarized glass ass'y and remove the Optical filter ass'y.

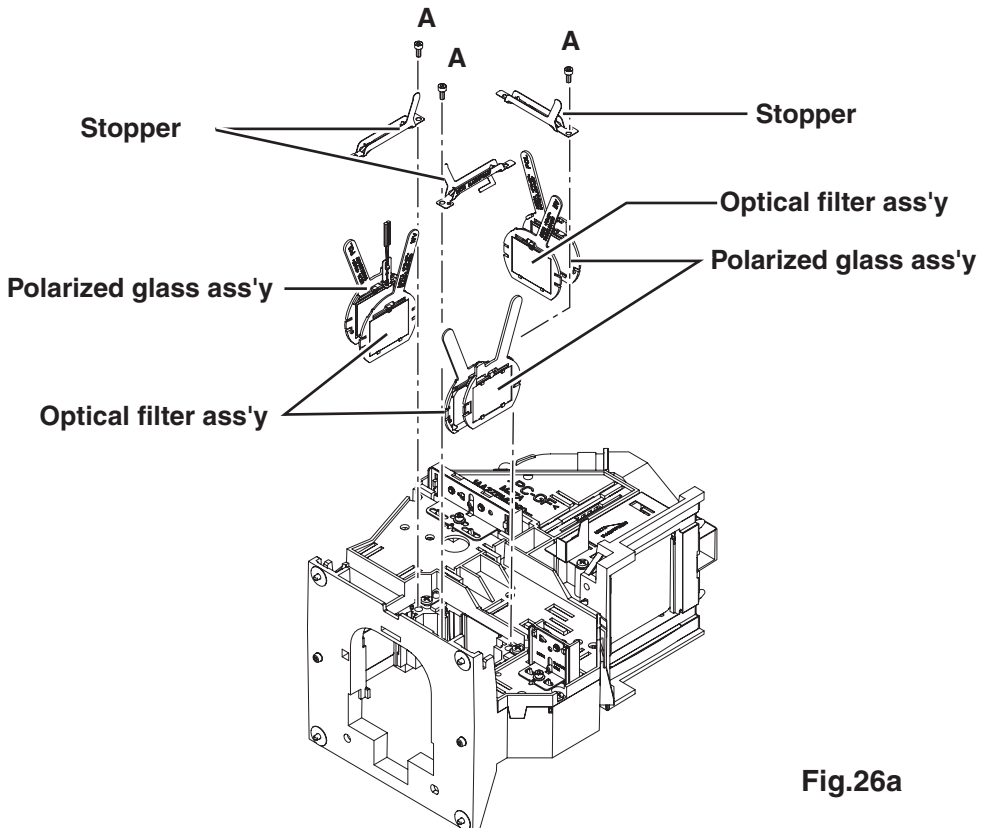


Fig.26a

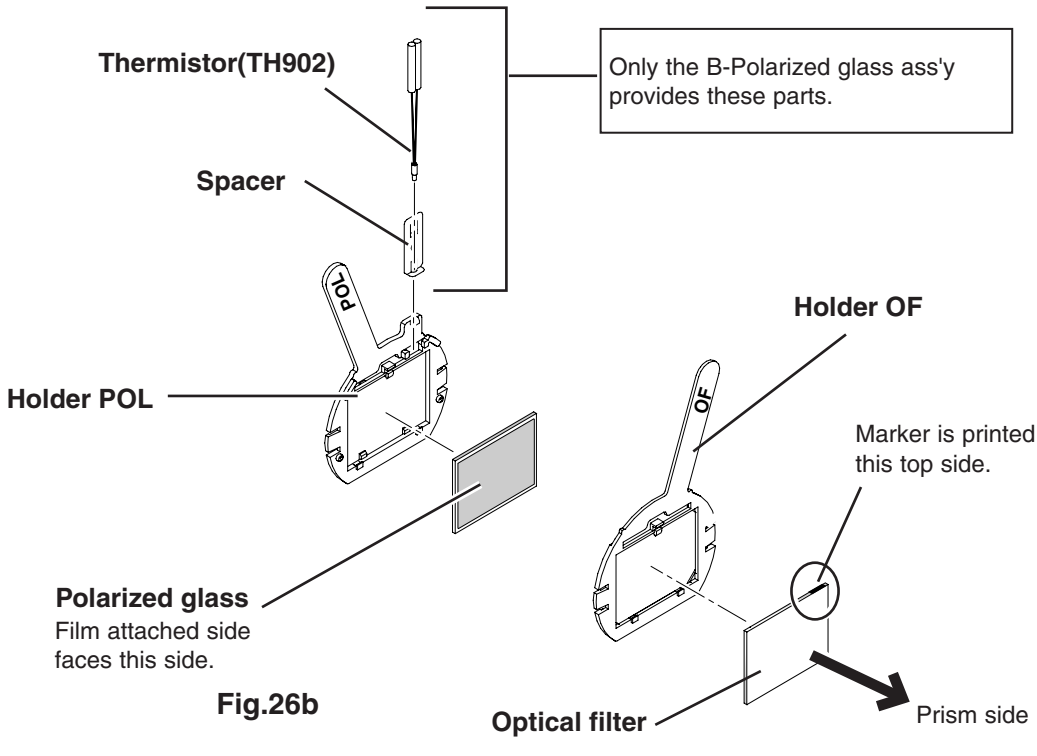


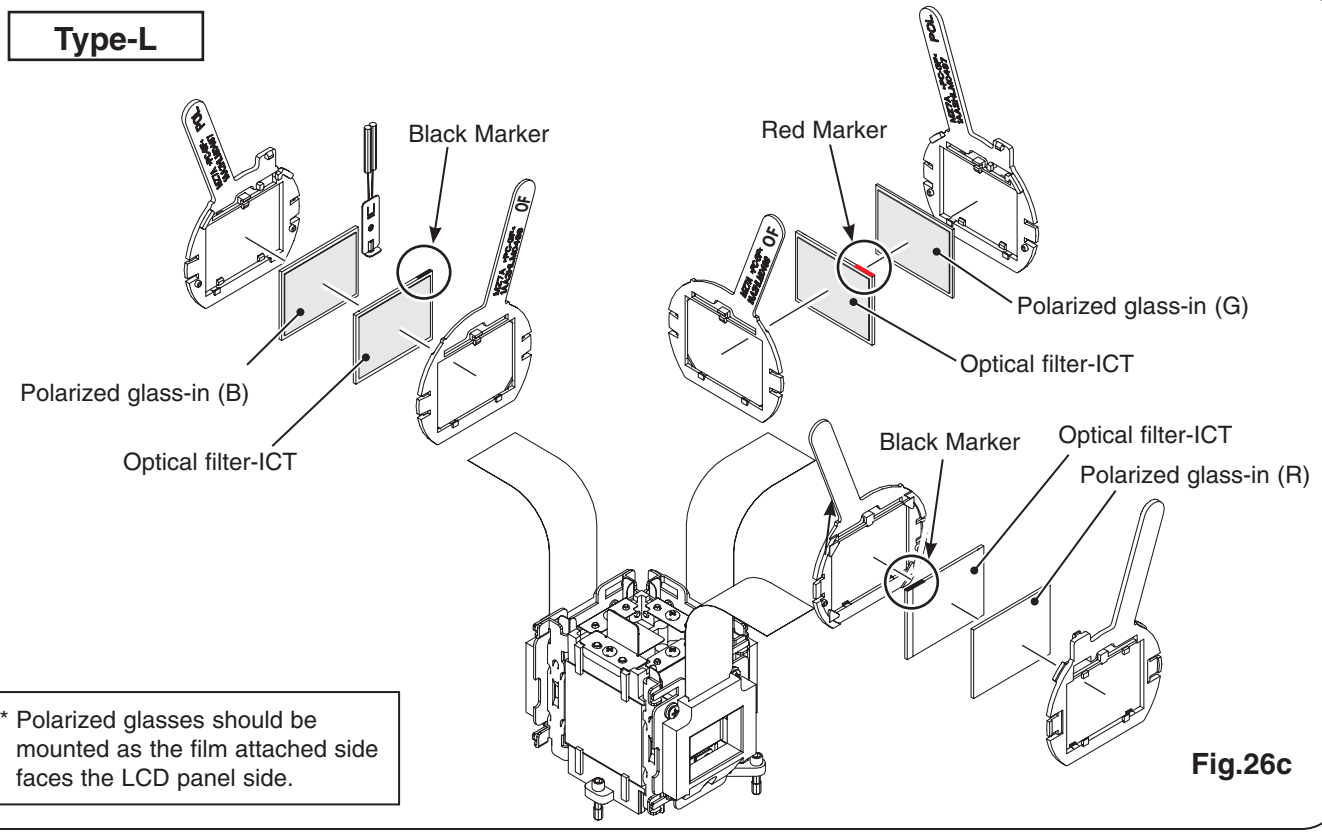
Fig.26b

* The optical filter must be used with the specified parts according to the mounted prism assembly type, Type-L or Type-R. See the parts list for further details.

26-2 Polarized glass ass'y and Optical filter ass'y mounting direction

There are 2 types combination of the LCD panel/prism assembly named Type-R and Type-L. Mount the polarized glasses and optical filters according to the type of the LCD panel assembly as shown in the figure below.

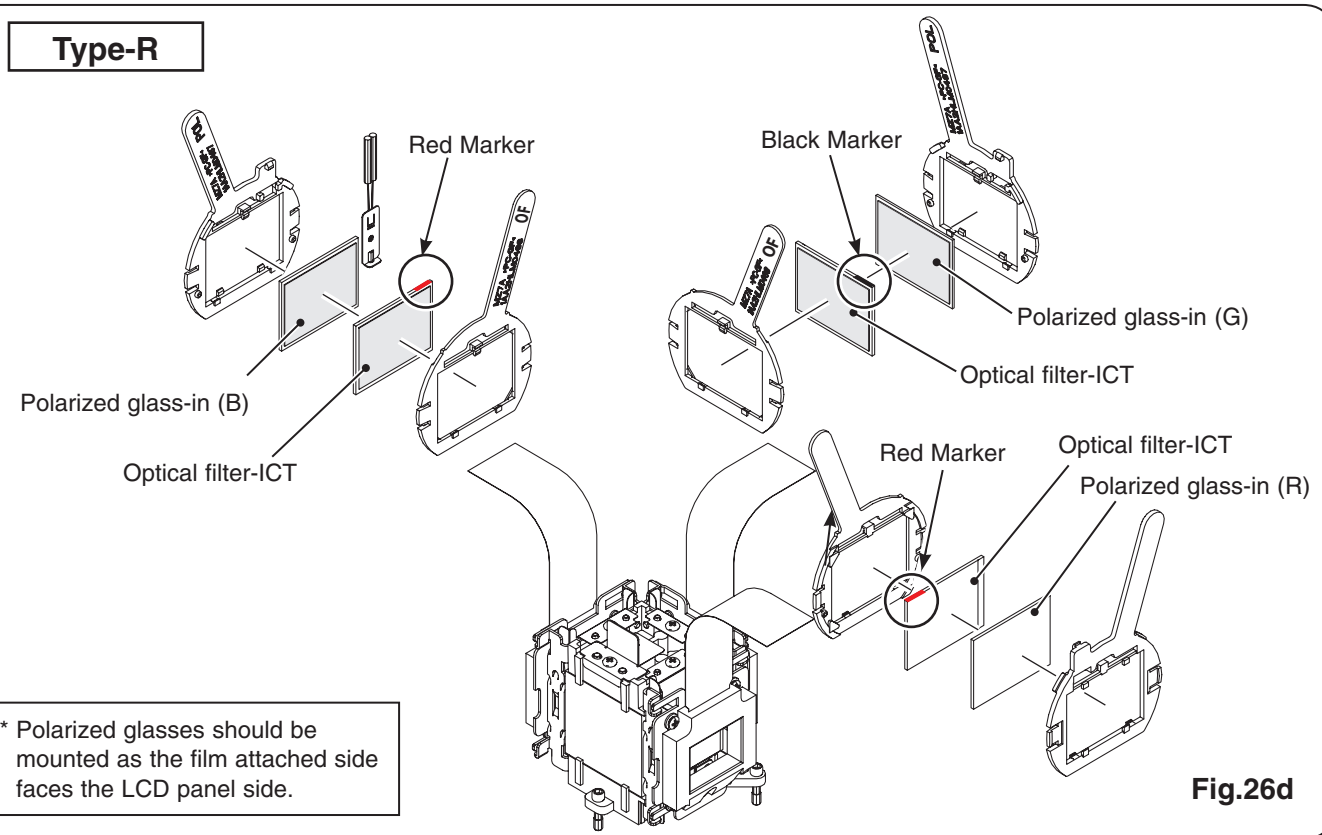
Type-L



* Polarized glasses should be mounted as the film attached side faces the LCD panel side.

Fig.26c

Type-R

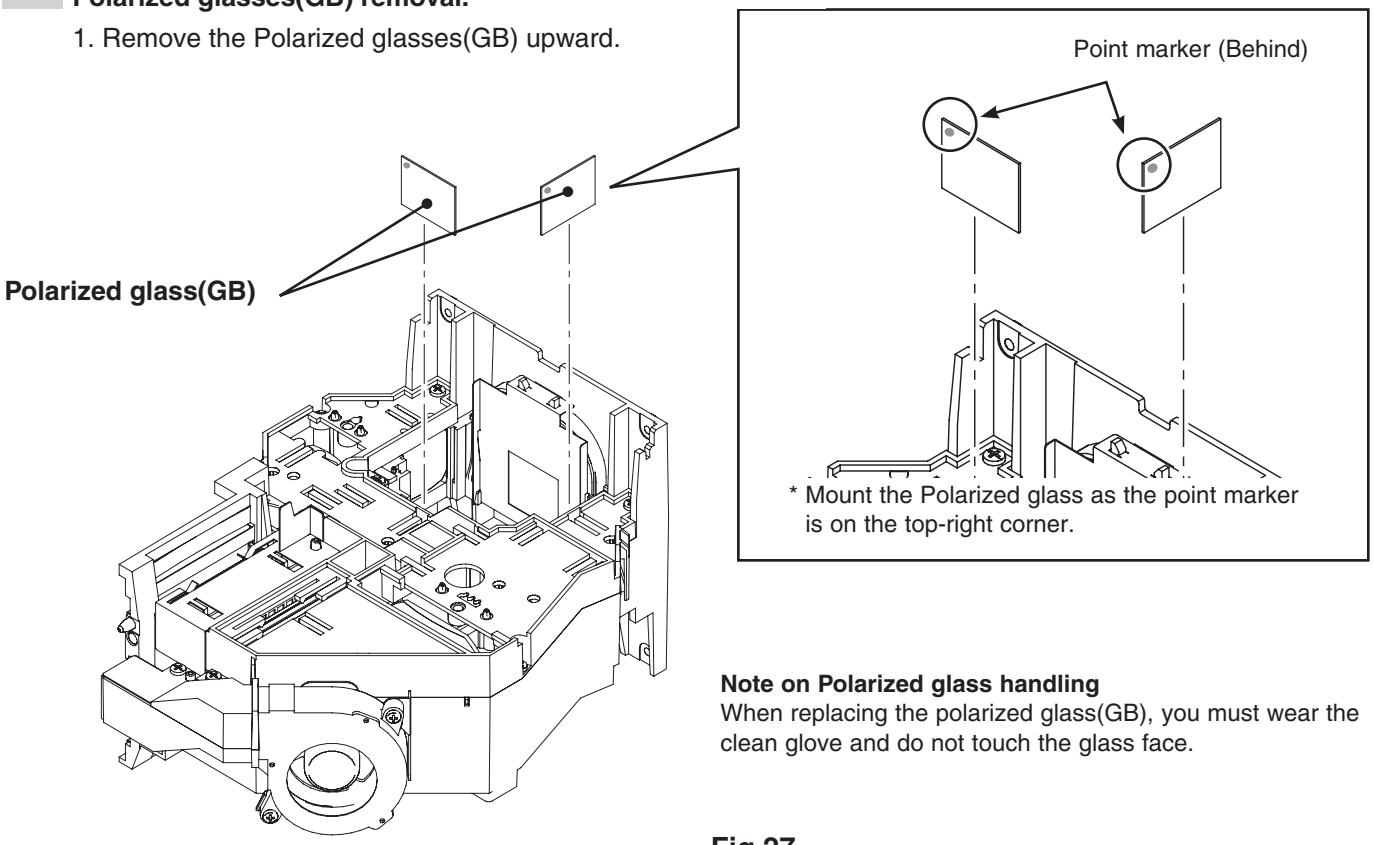


* Polarized glasses should be mounted as the film attached side faces the LCD panel side.

Fig.26d

27 Polarized glasses(GB) removal.

1. Remove the Polarized glasses(GB) upward.



Note on Polarized glass handling
When replacing the polarized glass(GB), you must wear the clean glove and do not touch the glass face.

Fig.27

28-1 Optical base top removal-1.

1. Remove 2 screws-A(T3X10) and remove the Stopper lens.

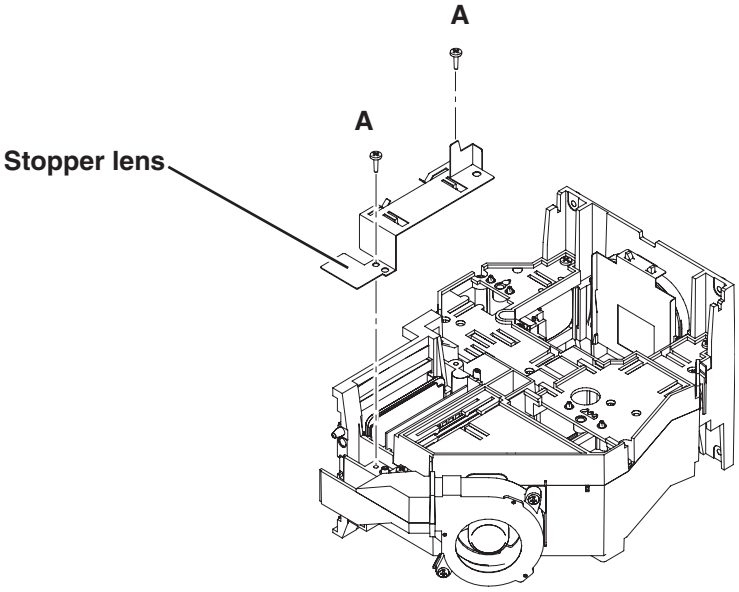


Fig.28a

28-2 Optical base top removal-2.

1. Remove 3 screws-A(T3X10) and remove the optical base top.

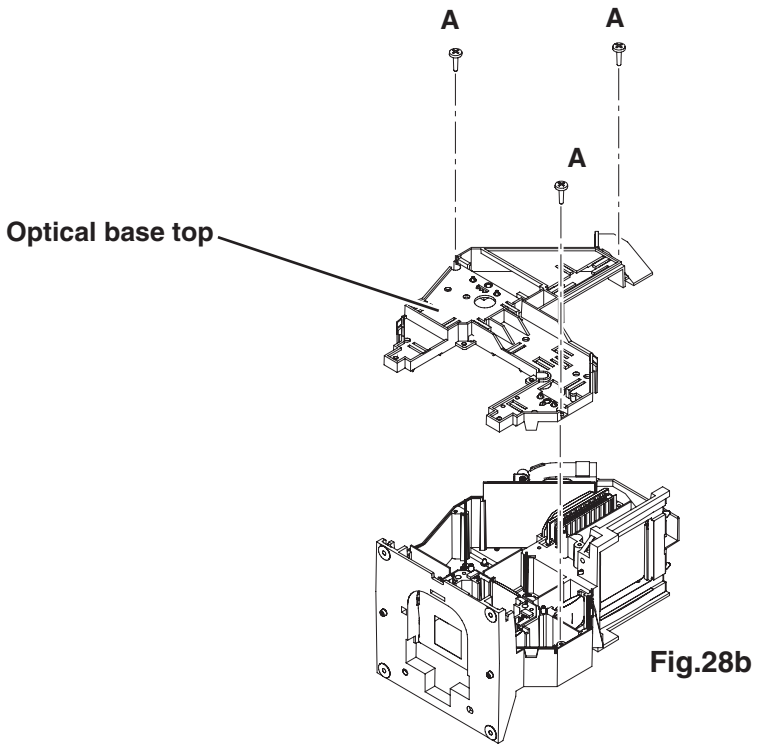


Fig.28b

28-3 Optical base top removal-3.

1. Remove 2 screws-A(T3X10) and remove the Fan(FN903) ass'y.
2. Unhook 2 hooks and pull out the Shield plate.

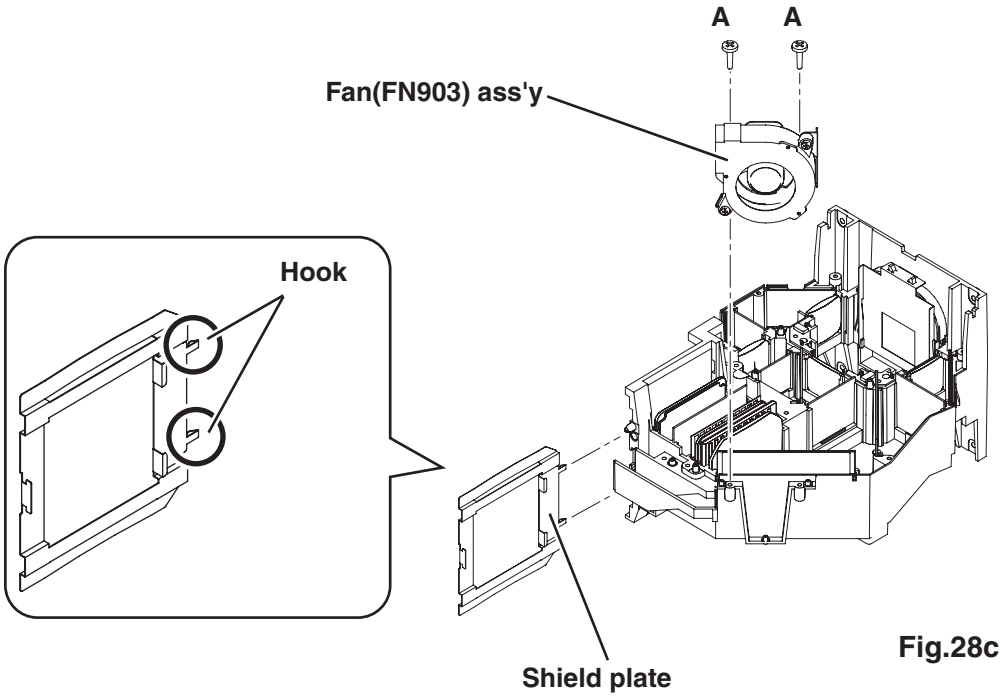


Fig.28c

29 Fan(FN903) ass'y disassemblies.

1. Remove 2 screws-A(M3X8) and remove the Fan(Fn903).

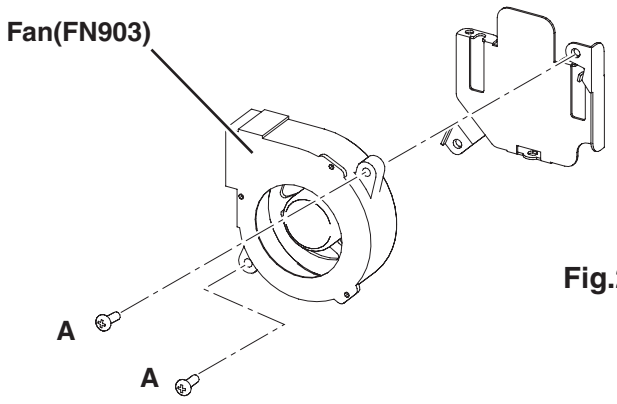
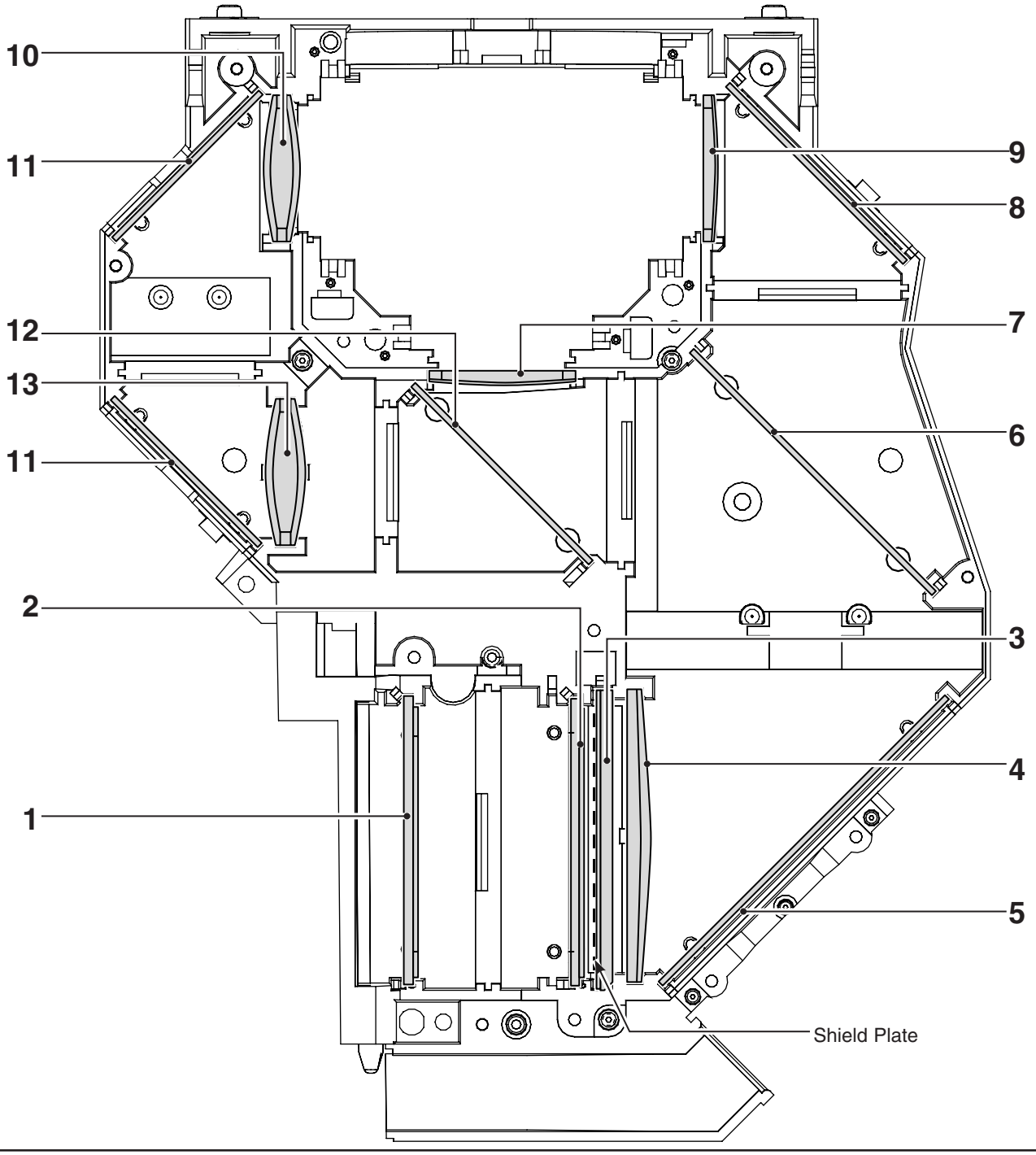
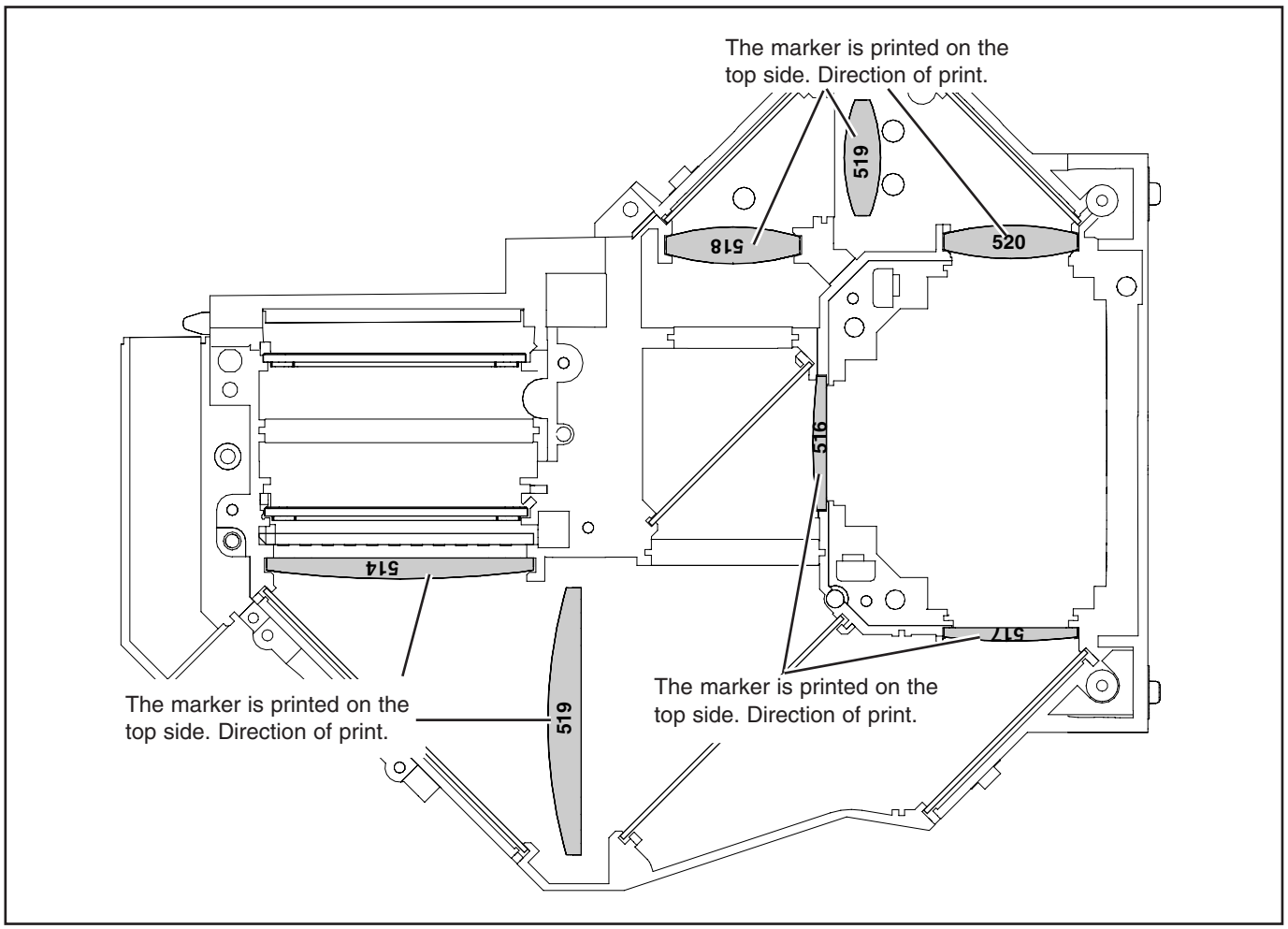


Fig.29

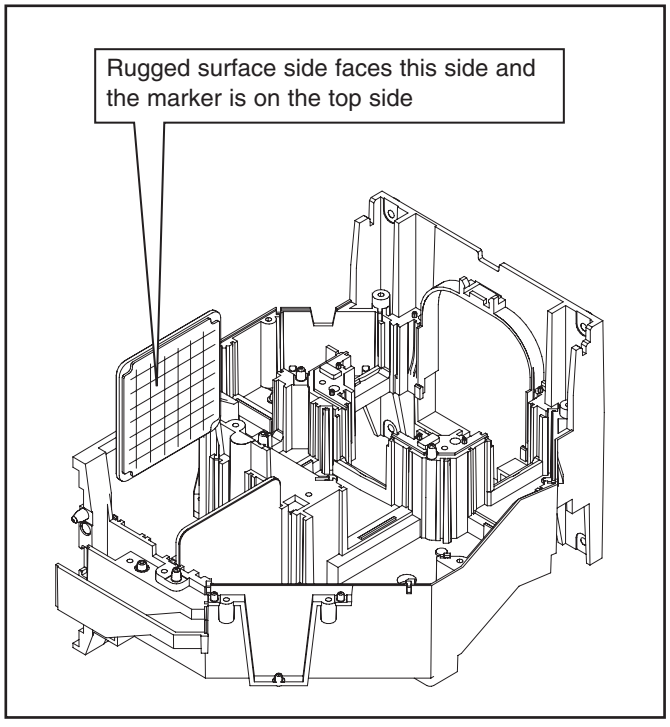
Optical parts locations and directions in the Optical Unit

No.	Parts Name	No.	Parts Name
1	LENS,INTEGRATOR(IN)	8	MIRROR(B)
2	LENS,INTEGRATOR(OUT)	9	LENS,CONDENSER(B)
3	ASSY,PRISM(PBS)	10	LENS,CONDENSER(R)
4	LENS,CONDENSER(IN)	11	MIRROR(R)
5	MIRROR(W-COLD)	12	DICHROIC MIRROR (G)
6	DICHROIC MIRROR (B)	13	LENS,RELAY(IN)
7	LENS,CONDENSER(G)		

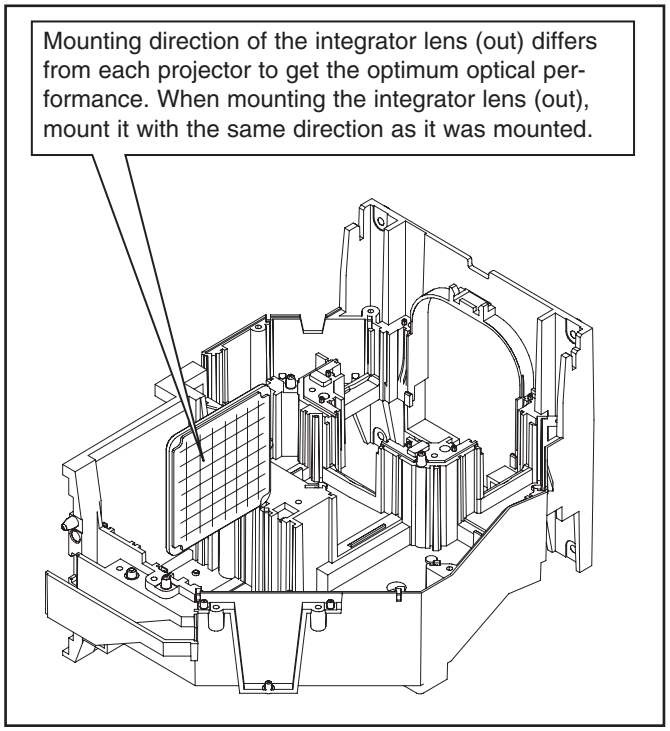


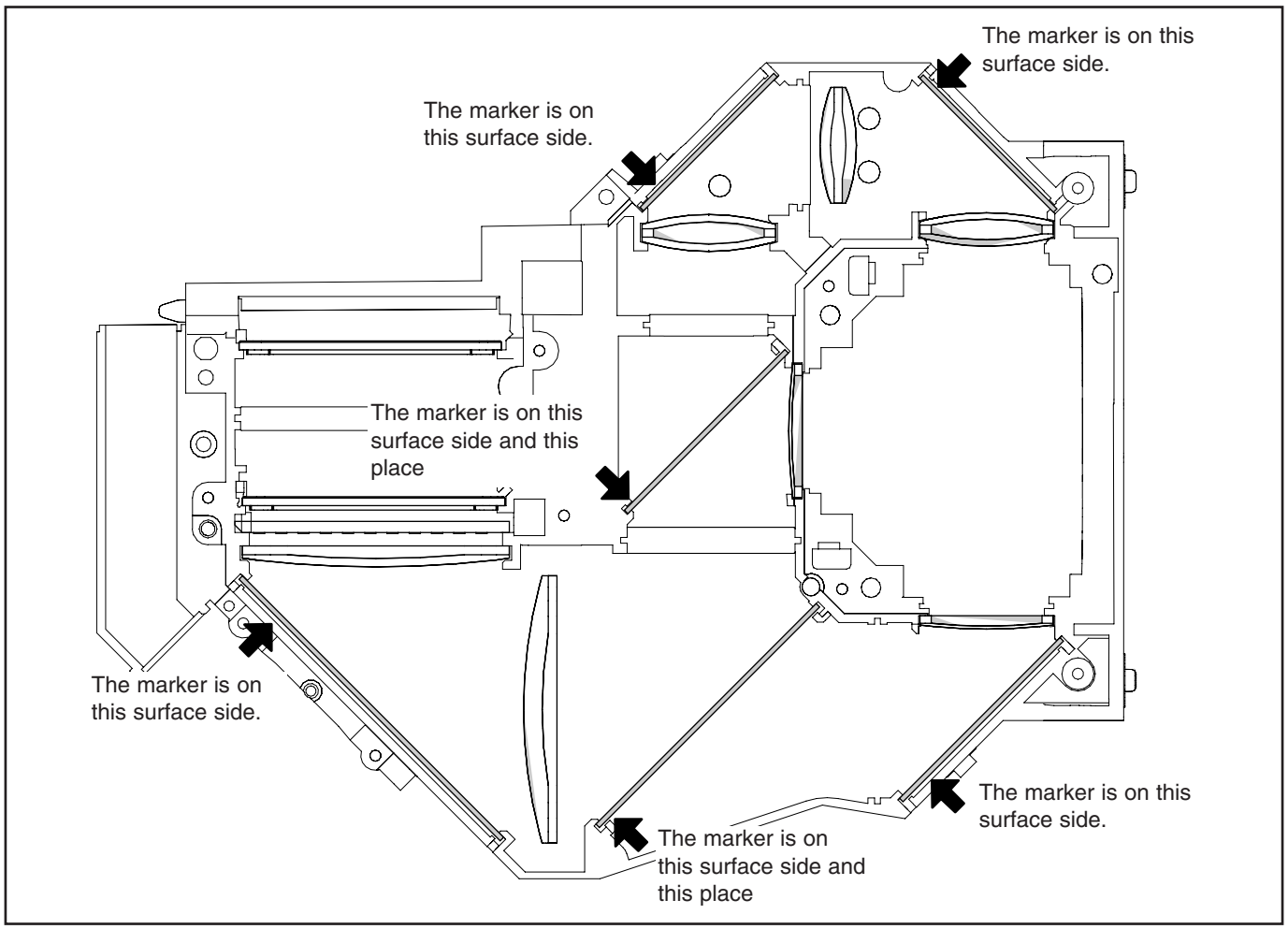


Integrator lens (IN)

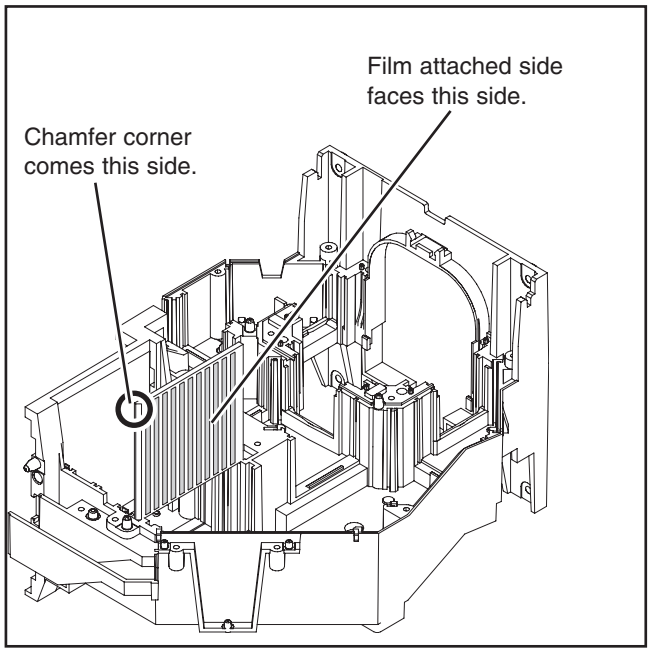


Integrator lens (OUT)




The marker is on this surface side.
The marker is on this surface side.
The marker is on this surface side and this place
The marker is on this surface side.
The marker is on this surface side.
The marker is on this surface side and this place

PBS


Film attached side faces this side.
Chamfer corner comes this side.

Adjustments

Adjustments after Parts Replacement

● : Adjustment necessary ❍ : Check necessary

		Disassembly / Replaced Parts									
		LCD/ Prism Ass'y	Conden-sor Lens	Relay Lens (OUT)	Polarized Glass (POL)	Optical Filter (OF)	Integ-rator Lens	PBS	Power Board	Main Board	Fans
Optical Adjustment	Optical axis adjustment	●	●	●			●	●			
	Contrast adjustment	●			●	●					
Electrical Adjustments	Fan voltage adjustment								●	●	●
	PC-Auto calibration adjustment									●	
	Video-Auto calibration adjustment									●	
	480i-Auto calibration adjustment									●	
	Common voltage adjustment	●								●	
	White balance adjustments	❍								❍	
	Color shading correction adjust-ments	❍								❍	
	Filter calibration adjustment								●	●	●
	Read/Write of gamma data									●	

Note on the main board replacement

When replacing the main board, take read/write procedure of the gamma adjustment data and color shading correction data.
The “gamma adjustment data” and “color shading correction data” of each panel have been adjusted precisely at the factory to match the characteristics of each panel.
When you replace the main board, you need to read out the "gamma adjustment data" and "color shading correction data" stored in the memory IC on the previous main board and write down them into the memory IC on the new main board. By this way, the projector is enabled to reproduce the picture which has the properly adjusted gamma characteristic and color shading correction.

Use "Projector Service Tool" software for Read/Write of the gamma adjustment data and color shading correction data. This tool also enable to correct the color shading and gamma characteristics.

PROJECTOR SERVICE TOOL v. 4.11
SERVICE PARTS NO.: 610 340 8811

Optical Adjustments

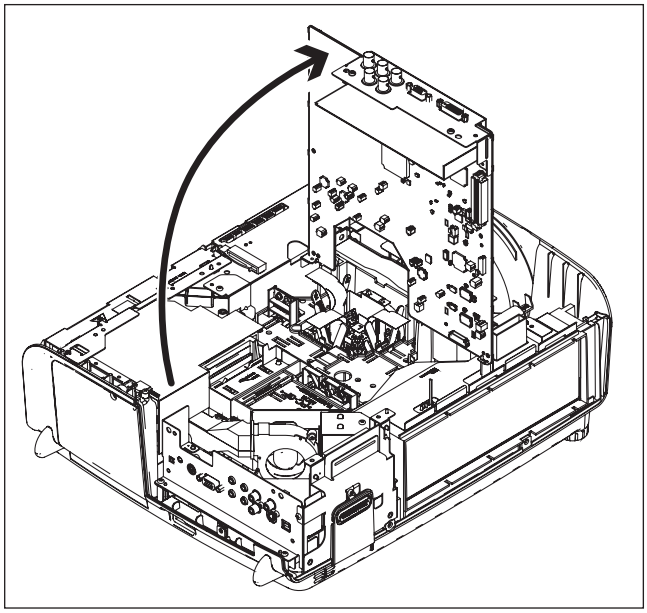
WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING

CAUTION: To prevent suffer of UV radiation, those adjustments must be completed within 25 minutes.

Before Adjustment

1. Each adjustment requires hex wrenches and slot screwdrivers.
2. Set the motorized lens shift to the center position (horizontal and vertical) with Lens Shift Button. Lens shift arrow on screen turns red at center of lens shift.
3. When adjusting optical components adjustments, using Standard Zoom Lens is recommended.
4. When adjusting the optical axis adjustment, follow the following procedure.
   a) Disconnect the three flexible cables of the LCD panels from the main board.
   (Do not touch the electrode of flexible cables.)
   b) As shown in a figure right, set the main board to the upright position.

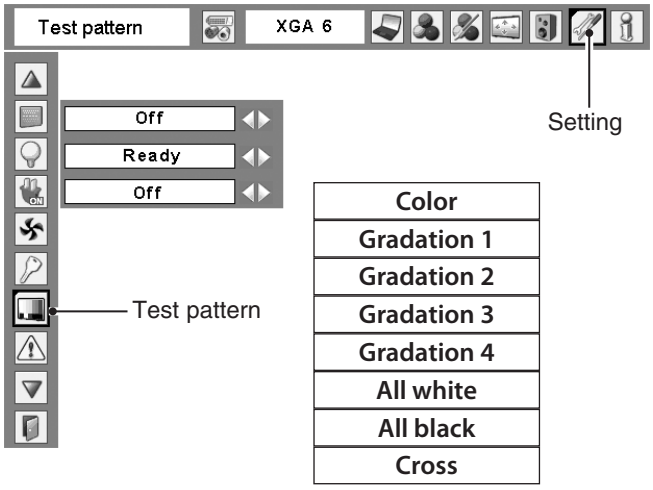
   CAUTION: Do not short main board with the chassis. Protect main board with necessary isolation materials from shorting.



To select the internal test pattern

1. Press the MENU button.
2. Select the "Test pattern" from the "Setting" menu.
3. Press the SELECT button. The test pattern menu appears on the screen.
4. Select a pattern name and press SELECT button.

To cancel the test pattern, press any of the buttons.

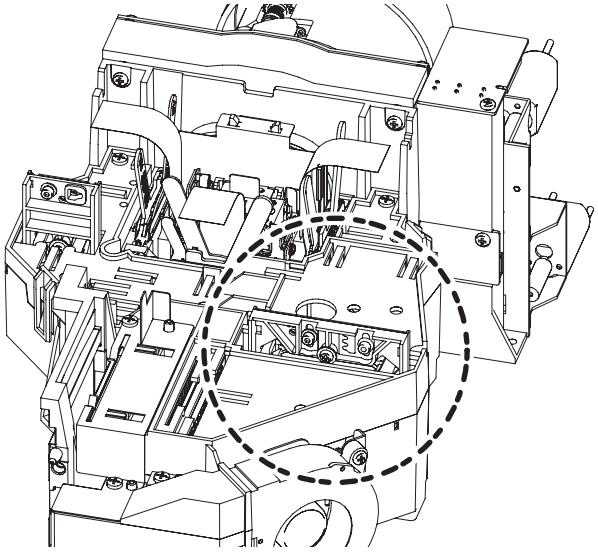


CAUTION:
When adjusting the optical components, do not insert any materials into the optical block for blocking the light. Or the optical block may be damaged by overheating or scratching the parts.

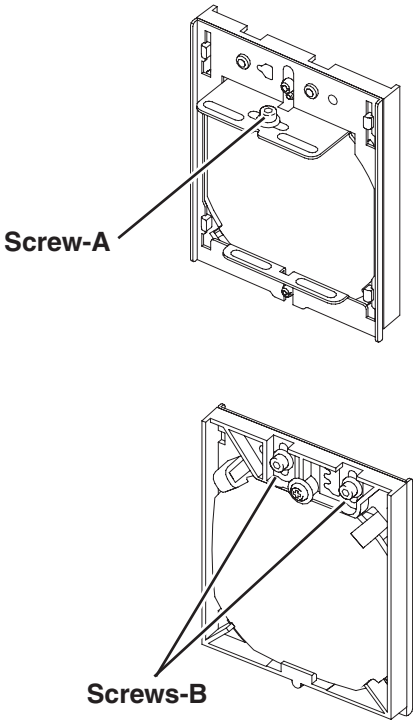
1. Optical axis adjustment

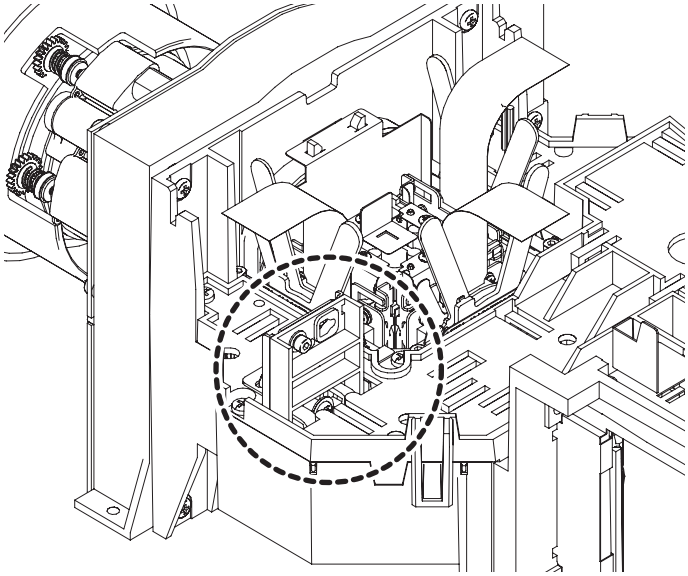
Before adjustment

1. Turn the projector on by a state of without FPC cables.
2. Condenser lens adjustment
   Loosen 1 screw A and 2 screws B.
3. Relay lens adjustment
   Loosen 1 screw C and 1 screw D.

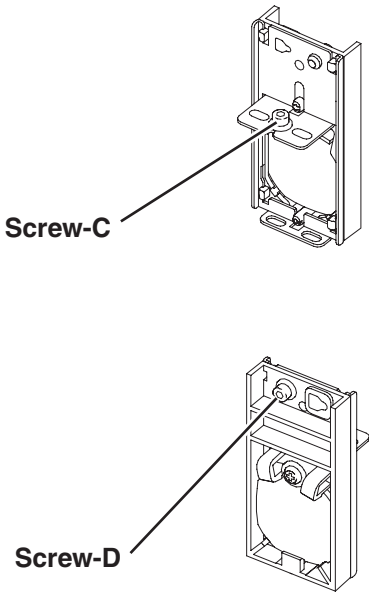


Condenser lens adjustment



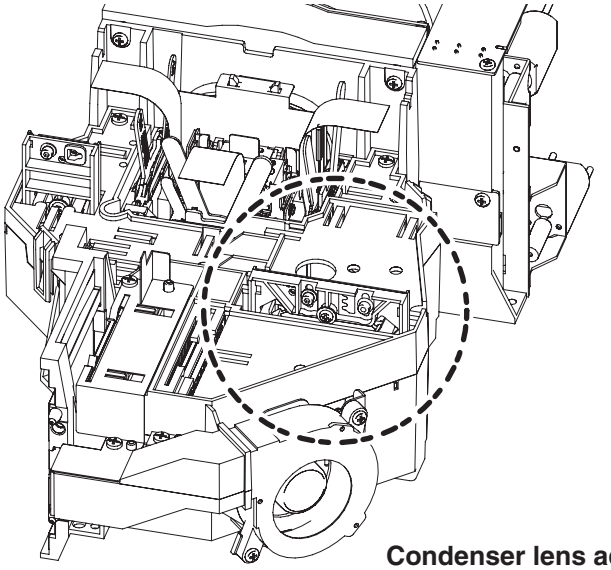


Relay lens adjustment

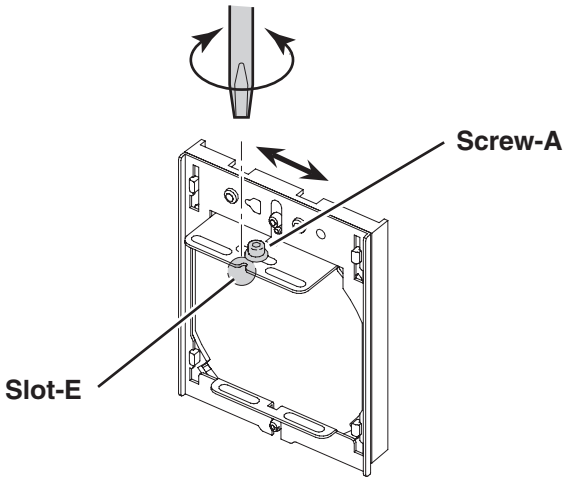


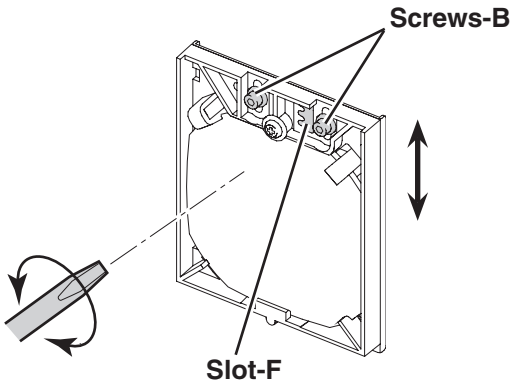
Condenser lens adjustment-1

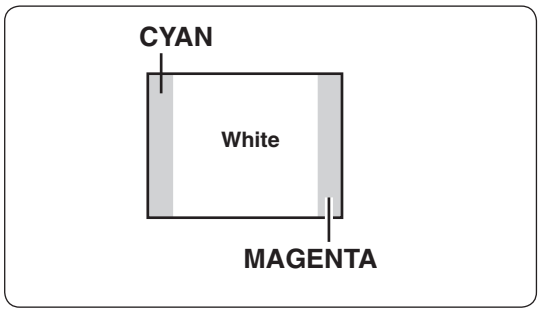
1. Adjust the slot E to make shading appears on the right and left(magenta and cyan) of the screen as shown in figure.
2. Adjust the slot F to make shading appears on the top and bottom(cyan and magenta) of the screen as shown in figure.

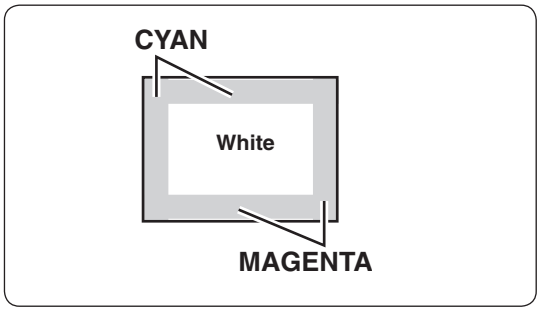


Condenser lens adjustment -1



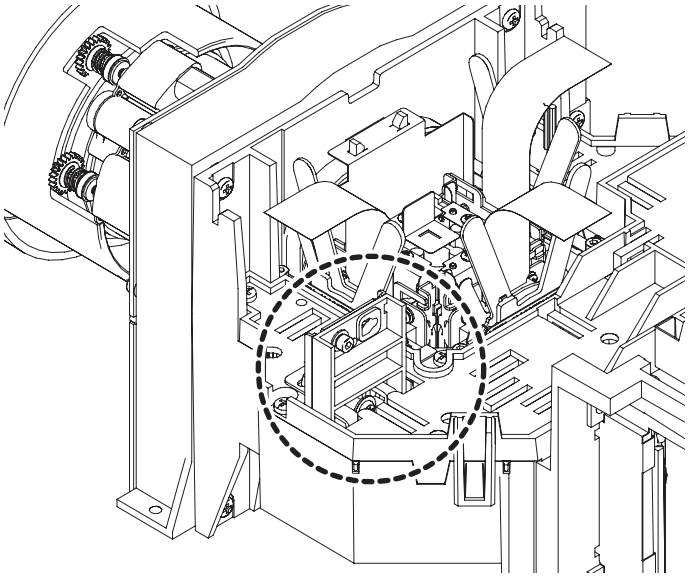


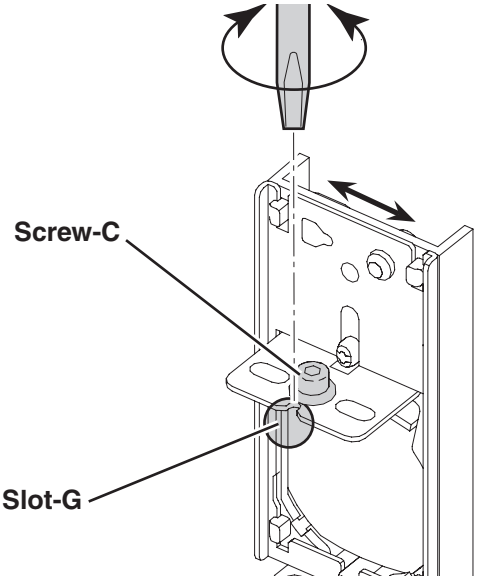


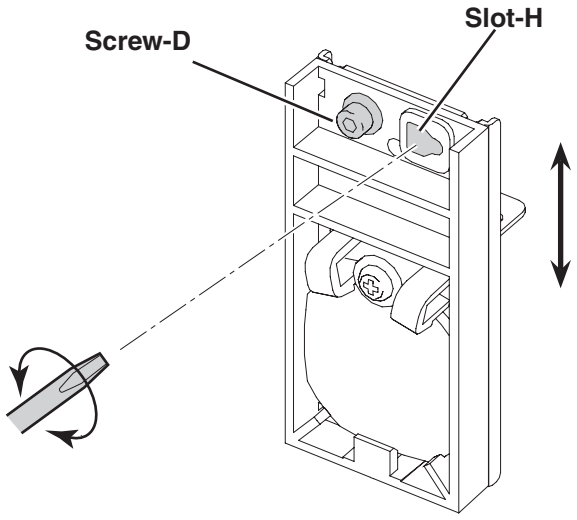


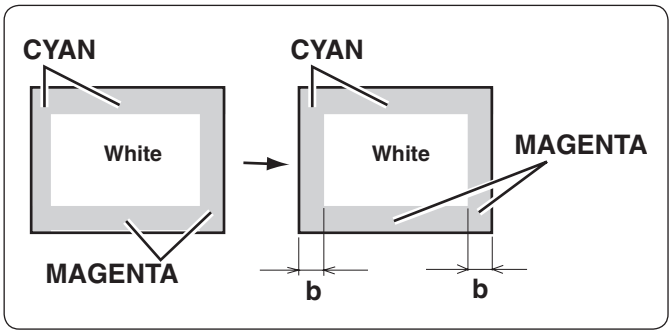
Relay lens adjustment

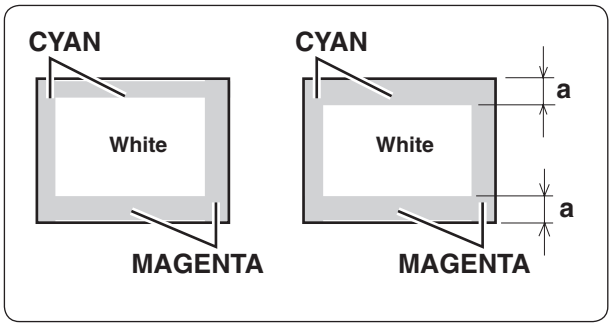
3. Adjust the slot G.
   It is adjusted that cyan and the magenta in the top and bottom part become the same width.
4. Adjust the slot H.
   It is adjusted that cyan and the magenta in the right and left part become the same width.
5. Tighten screw **C** and screw **D** to fix the relay lens unit.





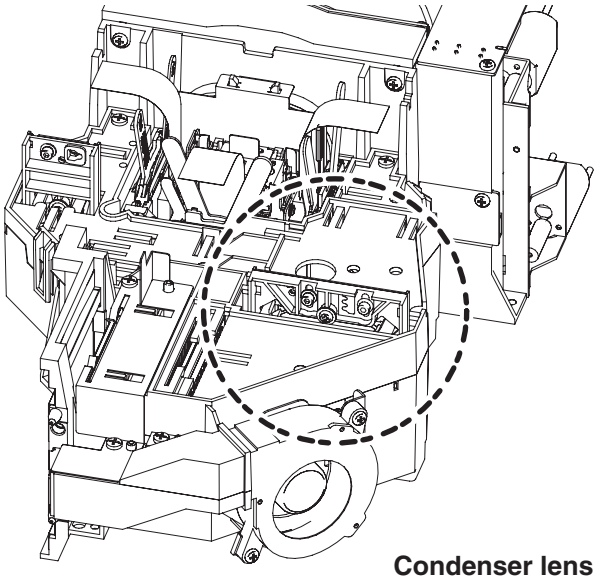




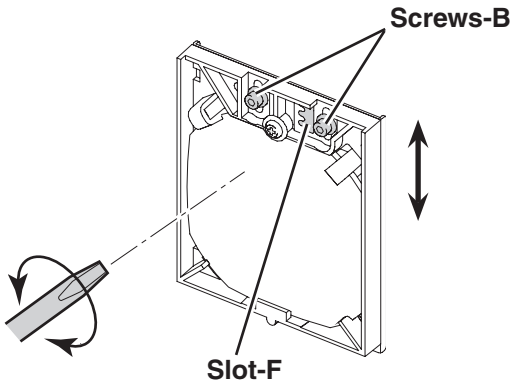


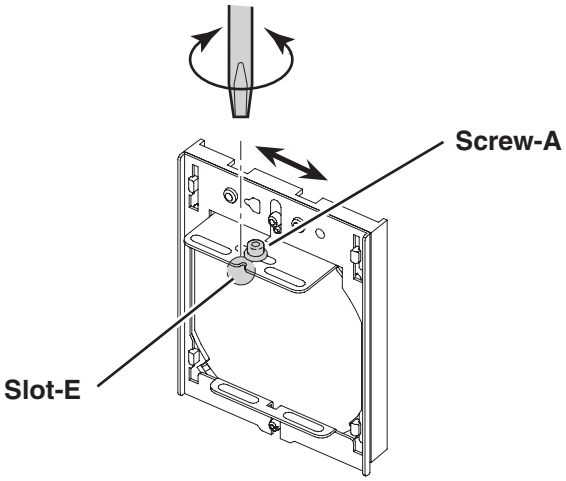
Condenser lens adjustment-2

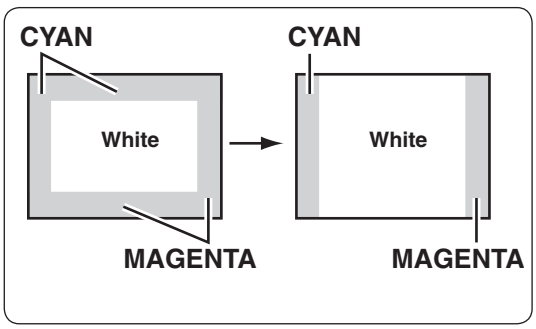
6. Adjust the slot F to make color uniformity in white by using a slot screwdriver.
   (Top and bottom shading are erased.)
7. Adjust the slots E to make color uniformity in white by using a slot screwdriver.
   (Right and left shading are erased.)
8. Tighten 1 screws **A** and 2 screws **B** to fix the integrator lens unit.

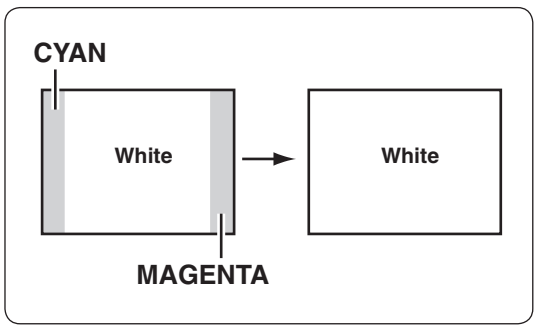


Condenser lens adjustment -1





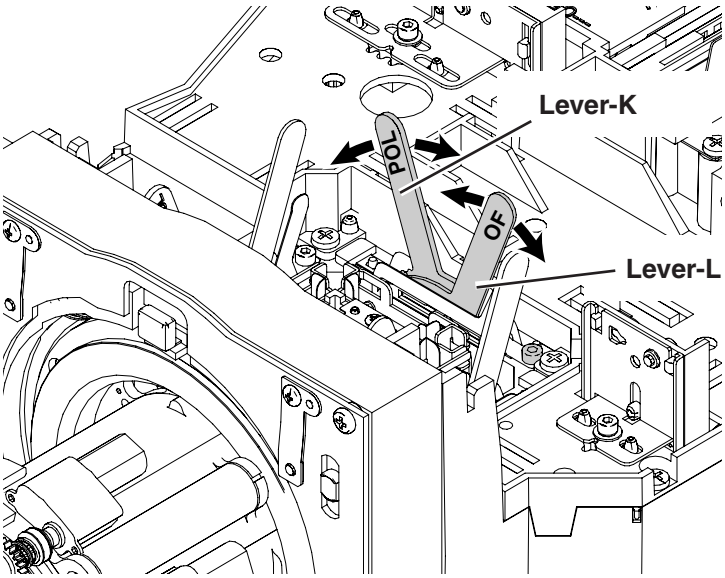


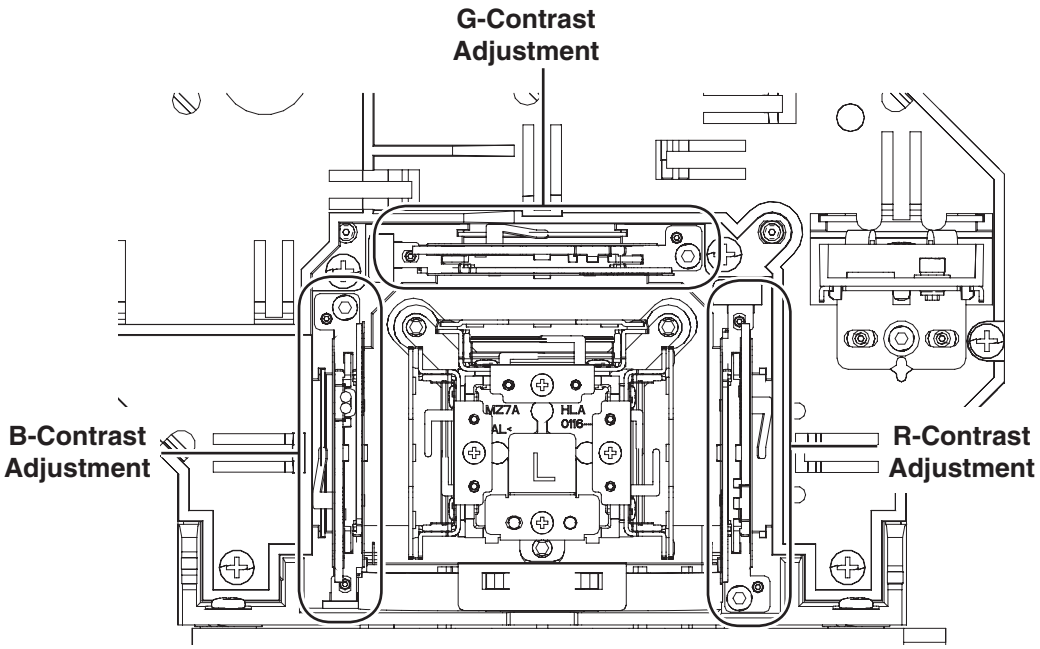


2. Contrast adjustment

1 Select the internal test pattern signal "All black" from the projector's menu "Menu -> Setting -> Test pattern".
2 Turn the lever **K** (POL) to obtain the darkest brightness and proper black color uniformity on the screen.
3 Turn the lever **L** (OF) to obtain the darkest brightness and proper black color uniformity on the screen.

Repeat steps 2 to 3 for remaining R and B contrast adjustment.
The adjustment should be taken in order of G-panel, R-panel and B-panel.
This adjustment should be taken in the dark room to adjust precisely.





Electrical Adjustments

Service Adjustment Menu Operation

To enter the service mode

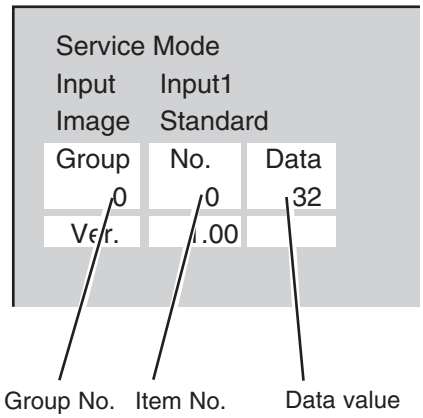
To enter the “Service Mode”, press and hold the **MENU** and **SELECT button** for more than 3 seconds. The service menu appears on the screen as follows.

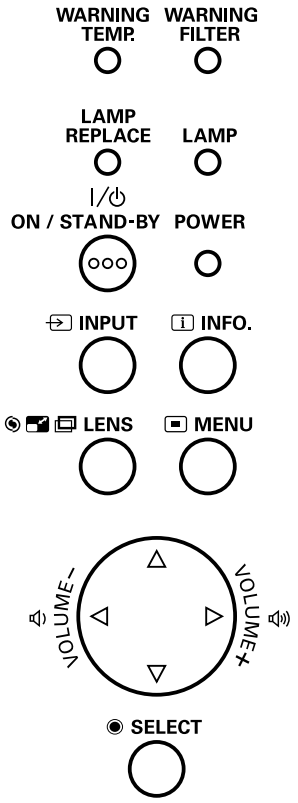
To adjust service data

Select the adjustment group no. by pressing the **MENU button** (increase) or **SELECT button** (decrease), and select the adjustment item no. by pressing the pointer ▲ or ▼ **button**, and change the data value by pressing the ◀ or ▶ **button**. Refer to the “Service Adjustment Data Table” for further description of adjustment group no., item no. and data value.

To exit the service mode

To exit the service mode, press the **ON/STAND-BY button**.





Memory IC (IC1391) Replacement

Memory IC on the main board stores the data for the service adjustments, and should not be replaced except for the case of defective device.
If replaced, the re-adjustments are required following to the “Electrical Adjustments”.
The data of lamp replacement counter is stored in the Memory IC.
Please note that the lamp replace counter will be reset when the memory IC is replaced.
(Lamp replace counter cannot be set to the previous value.)

● **Caution to memory IC replacement**

When memory IC is replaced with new one, the CPU writes down the default data of the service adjustments to the replaced IC as the mentioned on the service adjustment table. As these data are not the same data as factory shipped data, it should be required to perform the re-adjustments following to the “Electrical Adjustments”.
Please note that in this case the lamp replace counter will be reset.

● **Caution of Main Board replacement (in the case memory IC is not defective)**

When the main board is replaced, memory IC should be replaced with the one on previous main board. After replacement, it should be required to perform the re-adjustments following to the “Electrical Adjustments”.
In this case, the lamp replace counter can be kept the value as before.

Circuit Adjustments

CAUTION: The each circuit has been made by the fine adjustment at factory. Do not attempt to adjust the following adjustments except requiring the readjustments in servicing otherwise it may cause loss of performance and product safety. Before taking these adjustments, turn the projector for more than 10 minutes to stabilize the operation.

WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING.

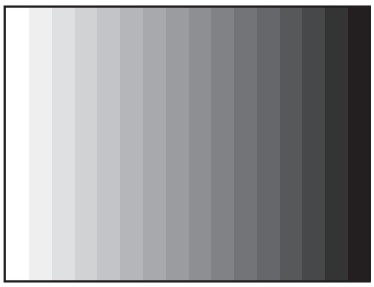
CAUTION:
To prevent suffer of UV radiation, those adjustments must be completed within 25 minutes.

[Adjustment Condition]

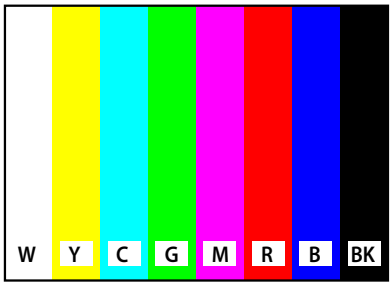
● Input signal

Computer signal ..... 0.7Vp-p/75Ω terminated (SXGA+)
Video signal ..... 1.0Vp-p/75Ω terminated (NTSC)
Component Video signal .... 0.7Vp-p/75Ω terminated (480i)

16 steps gray scale pattern



100% full color bar pattern



● Picture control mode..... “STANDARD” mode unless otherwise noted.

Note:
* Please refer to “Service Adjustment Menu Operation” for entering the service mode and adjusting the service data.

1 Fan Voltages adjustment

Equipment Digital voltmeter

1. Enter the service mode.
2. Change data values of each test point to adjust the fan driving voltage.

Group	No.	Fan	Connection	Adjustment value
250	**0**	Fan-1	K66D-1	**4.5 ± 0.05Vdc**
250	**1**	Fan-1	K66D-1	**13.8 ± 0.05Vdc**
250	**2**	Fan-2	K66E-1	**4.5 ± 0.05Vdc**
250	**3**	Fan-2	K66E-1	**13.8 ± 0.05Vdc**
250	**4**	Fan-3	K66F-1	**4.5 ± 0.05Vdc**
250	**5**	Fan-3	K66F-1	**13.8 ± 0.05Vdc**

2 PC-Auto Calibration adjustment

Input mode Computer mode
Input signal 16-step gray scale computer signal (SXGA+)

1. Enter the service mode.
2. To start the auto-calibration for PC adjustment, select Group "**260**", No. "**0**", and then change data value "**0**" to "**1**".

   After the auto-calibration completed, "OK" will appear on the screen.

3 Video-Auto Calibration adjustment

Input mode Video mode (Composite)
Input signal 100% color bar signal (NTSC)

1. Enter the service mode.
2. To start the auto-calibration for composite-video adjustment, select Group "**260**", No. "**0**", and then change data value "**0**" to "**1**".

   After the auto-calibration completed, "OK" will appear on the screen.

4 480i-Auto Calibration adjustment

Input mode Video mode (Component)
Input signal 100% color bar signal (480i)

1. Enter the service mode.
2. To start the auto-calibration for component-video adjustment, select Group "**260**", No. "**0**", and then change data value "**0**" to "**1**".

   After the auto-calibration completed, "OK" will appear on the screen.

5 Common Voltage adjustment

Input mode Computer mode
Input signal 50%-gray pattern computer signal or 16-step gray scale computer signal

1. Enter the service mode.
2. Select Group "**101**", No. "**42**" and then change data value from "**0**" to "**2**".
3. Change data value to obtain **the minimum flicker** for each color on screen.

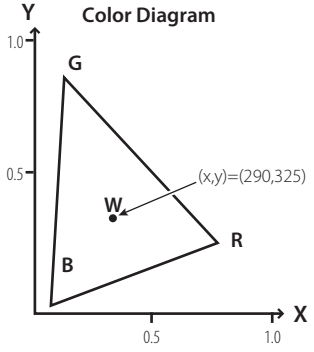
Group	No.	Adjustment
103	**18**	**for red flicker**
103	**19**	**for green flicker**
103	**20**	**for blue flicker**

4. Select Group "**101**", No. "**42**" and then change data value from "**2**" to "**0**".

6 White Balance adjustment

1. Enter the service mode. (Input signal is not required.)
2. Select Group and No. of white balance adjustment items referring to the table below. For example, when adjusting the white balance in the PC Standard mode, select Group - No. "982 - 13 (X value)" or "982 - 14 (Y value)".
3. Change the Data value as referring to the color diagram.
4. Select Group "**982**", No. "**72**". When the data value is changed "**0**" to "**10**", the adjustment is performed automatically. This adjustment takes for 10-20 seconds. After completing the adjustment, the data value returns to "0".
5. Check proper white balance and gray scale are obtained in the selected input mode.

Group-No.	Input Adjustment Mode (X, Y)	Data (Initial value)
982 - 1	PC Dynamic - X	285
982 - 2	PC Dynamic - Y	315
982 - 13	PC Standard - X	290
982 - 14	PC Standard - Y	325
982 - 25	PC Real - X	300
982 - 26	PC Real - Y	332
982 - 37	AV Dynamic - X	287
982 - 38	AV Dynamic - Y	310
982 - 49	AV Standard - X	300
982 - 50	AV Standard - Y	325
982 - 61	AV Cinema - X	310
982 - 26	AV Cinema -Y	335



* These initial values are for the reference not for setting the actual color value.

7 Color Shading Correction adjustments

If the correction of the Color shading adjustment is necessary, please adjust the “Color shading” by using the “PROJECTOR SERVICE TOOL” software supplied separately.
The color shading correction adjustment for this model should be performed with the whole-gray patterns specified as below.

4-input patterns:
6% gray, 13% gray, 25% gray, 50% gray

8 Filter Calibration adjustment

1. Enter the service mode, select group no. “**251**” and item no. “**0**” .
2. To start the adjustment, change data value from “**0**” to “**1**”. After the auto-calibration completed, "OK" will appear on the screen.

IMPORTANT
Before taking this adjustment, you need to replace the air filter with new one or clean up it and make sure the filter is securely installed.

Read/Write of gamma data

When replacing the main board, take read/write procedure of the gamma adjustment data and color shading correction data.
The “gamma adjustment data” and “color shading correction data” of each panel have been adjusted precisely at the factory to match the characteristics of each panel. When you replace the main board, you need to read out the "gamma adjustment data" and "color shading correction data" stored in the memory IC on the previous main board and write down them into the memory IC on the new main board. By this way, the projector is enabled to reproduce the picture which has the properly adjusted gamma characteristic and color shading correction.

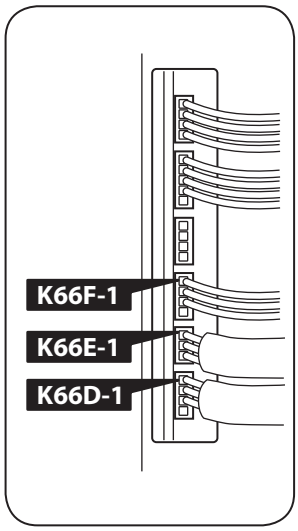
Use "Projector Service Tool" software for Read/Write of the gamma adjustment data and color shading correction data.

The Projector Service Tool can be ordered with following service code.

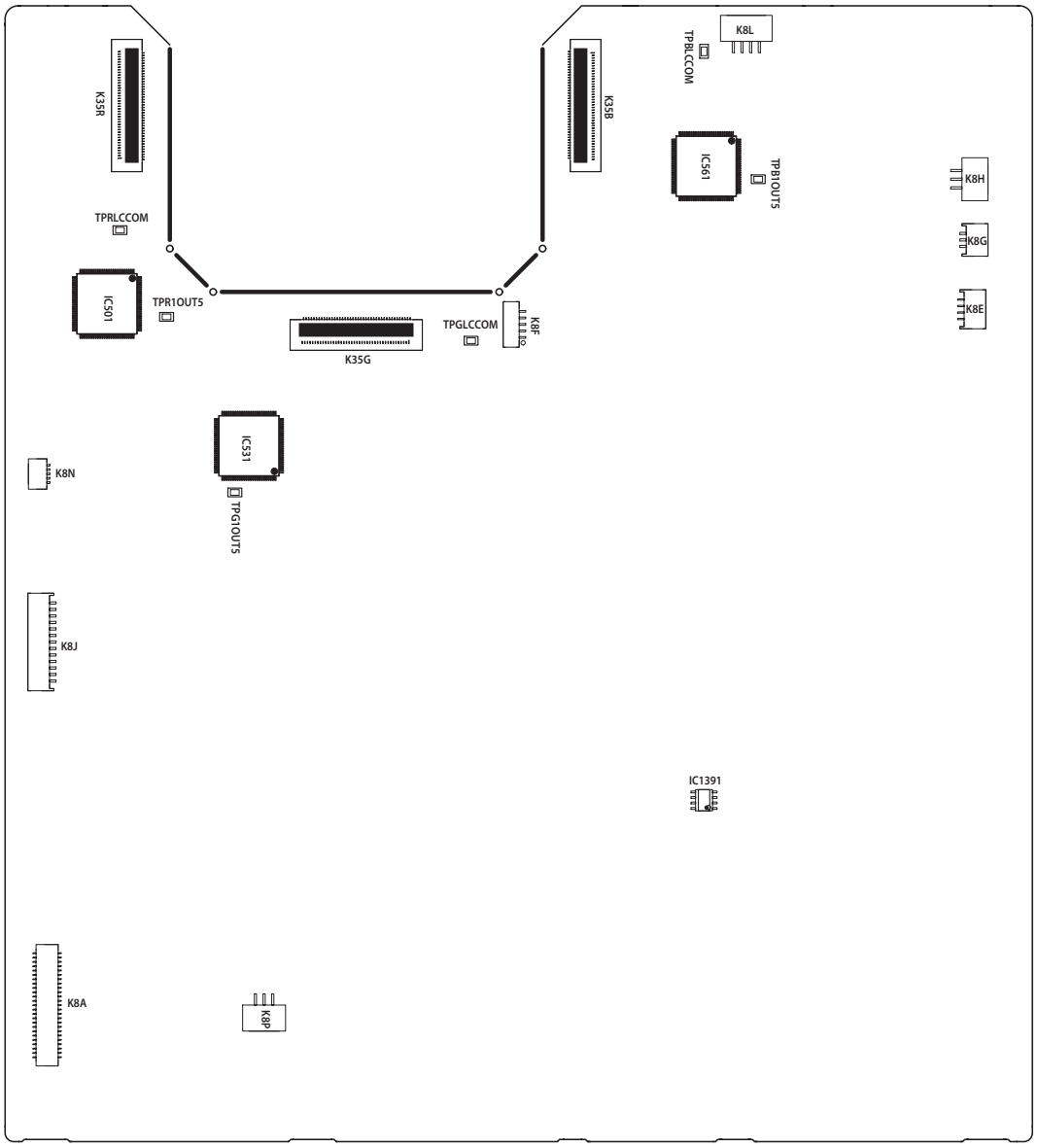
PROJECTOR SERVICE TOOL Ver. 4.11
Service Parts No. 610 340 8811

Test Points and Locations

Top view around
POWER(DC) board



MAIN BOARD



Service Adjustment Data Table

These initial values are the reference data written from the CPU ROM to memory IC when replaced new memory IC. The adjustment items indicated with "*" are required to readjust following to the "Electrical adjustments". Other items should be used with the initial data value.

Group/Item	Item Name	Function	Initial	Range	Note
0	AD Converter (PW392)				
0	ADC G-OFFSET	SCART	512	0-1023	
1	ADC R-OFFSET	SCART	512	0-1023	
2	ADC B-OFFSET	SCART	512	0-1023	
3	ADC G-GAIN	SCART	310	0-1023	
4	ADC R-GAIN	SCART	293	0-1023	
5	ADC B-GAIN	SCART	293	0-1023	
10	SOGTH	SCART	4	0-15	
11	SOGHYSDIS	SCART	0	0-1	
12	HS1TH	H Sync1 Threshold	4	0-7	
13	HS0TH	H Sync0 Threshold	4	0-7	
20	Anti-Alias Filter	SCART	4	0-7	
21	Anti-Alias Downsample	SCART(Read Only)	3	0-3	
22	Anti-Alias High Frequency	SCART(Read Only)	3	0-3	
10	AD Converter (ISL51002)				
0					
1					
2					
3	ADC G-GAIN	PC / YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50) / YCbCr 1080p (1080p50)	235/120/128/ 134/134/ 134	0-1023	
4	ADC R-GAIN	PC / YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50) / YCbCr 1080p (1080p50)	235/140/147/ 146/146/ 146	0-1023	
5	ADC B-GAIN	PC / YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50) / YCbCr 1080p (1080p50)	235/140/152/ 144/144/ 144	0-1023	
20	Video Decoder				
0	Y Level	Composite 60Hz / S-Video 60Hz / Composite 50Hz / S-Video 50Hz-Y Level (ADC RGB Gain)	153/153/161/161	0-1023	
1	C Level	Composite 60Hz / S-Video 60Hz / Composite 50H / S-Video 50Hz-C Level (ADC Saturation)	410/410/440/440	0-1023	
10	XCXL Parameter	XCXL Level	2	0-4	
11	Sync Amp Low	Minimum sync amplitude threshold for HLOCK 1 to 0 transition	0x0700	0-9999	
12	Sync Amp High	Minimum sync amplitude threshold for HLOCK 0 to 1 transition	0x1000	0-9999	
13	Luma Setup Enable	7.5IRE Mode (Effective NTSC only)	0	0-1	
14	Anti-Alias Filter	Anti-Alias Filter	5	0-7	
15	Anti-Alias Downsample	Anti-Alias Downsample	1	0-3	
16	Anti-Alias High Frequency	Anti-Alias High Frequency	2	0-3	
17	CSC Adjust	Composite / S-Video-CSC Adjust	0x400 / 0x400	0x300-0x500	
40	General				
0	IP Mode	Set at IP OFF 0: IP Block not used 1: IP Block used IP OFF	1	0-1	
1	3:2 PullDown Mode	bit0 : Global Motion bit1 : Video Motion	1	1-3	
2	Detect Film Mode Enable	0 : 2:3pull down & 2:2pull down 1 : 2:3pull down 2 : 2:2pull down	0	0-2	
3	NR Enable for Analog YUV	0 : Noise Reduction detecting with Y and U	1	0-1	
4	NR Enable for Digital YUV	1 : Noise Reduction detecting with Y Analog YUV : PC/Video/S-Video/Component Digital YUV : HDMI <NSYUVEN>	0	0-1	
41	Deinterlacer setting	Parameter at Progressive Mode1, Film			

Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
0	Motion Adaptive Weight Value	<KDEINT>	30/30/30	0-255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4/4/4	0-4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0/0/0	0-1	Deinterlacer Setting-Group Group 1 : Composite / S-Video Group 2 : Component / Scart / PC Group 3 : HDMI
42	Deinterlacer setting	Parameter at Progressive Mode2			
0	Motion Adaptive Weight Value	<KDEINT>	0/0/0	0-255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	2/2/2	0-4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0/0/0	0-1	
47	Noise Reduction (Time)	Parameter at NR L1			
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0-2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0-1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0-1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0-1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	50	0-255	
49	Noise Reduction (Time)	Parameter at NR L2			
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0-2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0-1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0-1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0-1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	100	0-255	
50	2:2pull down setting				
0	22Film Mode Sensitivity	Film Detection Sensitivity <FILMSTVT22>	4	1-5	
1	22Film Mode Threshold Low	<FILMTHRD22A>	80	0-1023	
2	22Film Mode Threshold High	<FILMTHRD22B>	120	0-1023	
3	Video Motion Window Start X	<VOFSTARX>	10	0-255	
4	Video Motion Window Stop X	<VOFSTOPX>	10	0-255	Film mode detection range
5	Video Motion Window Start Y	<VOFSTARY>	10	0-255	
6	Video Motion Window Stop Y	<VOFSTOPY>	10	0-255	
51	2:3pull down setting				
0	Global Motion Sensitivity	Film Detection Sensitivity <FILMSTVT23>	4	1-5	
1	Video Motion Sensitivity	Film Detection Sensitivity <VOFSTVT>	4	1-5	
2	Video Motion Threshold Low	<VOFTHRDA>	120	0-1023	
3	Video Motion Threshold High	<VOFTHRDB>	180	0-1023	
4	Global Motion 23Film Threshold	<FILMTHRD23>	100	0-1023	
5	Global Motion Window Start X	<GMDSTARX>	10	0-255	
6	Global Motion Window Stop X	<GMDSTOPX>	10	0-255	Film mode detection range
7	Global Motion Window Start Y	<GMDSTARY>	10	0-255	
8	Global Motion Window Stop Y	<GMDSTOPY>	10	0-255	
52	Scaling Filter				
0	Scaling Filter	Group: Group 01-Composite Group 02-S-Video Group 03-Scart Group 04-PC Group 05-YCbCr/RGB 480i, 575i Group 06-YCbCr/RGB 480p, 575p Group 07-YCbCr/RGB 720p60, 720p50 Group 08-YCbCr/RGB 1035i, 1080i60, 1080i50 Group 09-YCbCr/RGB 1-80p	G01-7 G02-7 G03-5 G04-37 G05-8 G06-9 G07-9 G08-9 G09-5	0-37	
1	Difference Scaling Filter	Filter Differential value at IP OFF	0	0-20	
55	LTI / CTI				
0	Video Enhancement Enable	VEHEN	1	0-1	
1	DLTI Gain	DLTIGAIN	3	0-15	
2	DLTI Frequency	DLTIFREQ	2	0-3	
3	Bypass Anti-Alias Filter	DTIBYPASSAAL	0	0-1	
4	Lower DCTI Frequency	LOWERDCTIFREQ	1	0-1	
5	DCTI Gain	DCTIGAIN	4	0-15	
6	DCTI Frequency	DCTIFREQ	0	0-3	
7	Color Shift Limit	COLORSHIFTLMT	3	0-3	
60	Sub Image				

Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
0	Center Contrast		534/578/534/534/492/492	0-1023	
1	Center Brightness		512/512/496/496/512/512	0-1023	
2	Center Color		560/560/560/512/560/560	0-1023	
3	Center Tint		91/91/91/90/91/91	0-180	
4	Center Sharpness		16/16/16/16/16/16	Fixed	
5	Center WB Red	Group	512/512/512/512/512/512	0-1023	
6	Center WB Green	Group 1 : Composite (Video), S-Video	512/512/512/512/512/512	0-1023	
7	Center WB Blue	Group 2 : Component	512/512/512/512/512/512	0-1023	
8	Center BB Red	Group 3 : Scart	512/512/512/512/512/512	0-1023	
9	Center BB Green	Group 4 : RGB Analog (Computer)	512/512/512/512/512/512	0-1023	
10	Center BB Blue	Group 5 : RGB Digital (Digital)	512/512/512/512/512/512	0-1023	
11	Alpha Contrast	Group 6 : HDMI<Not used>	60/60/60/60/60/60	0-1000	
12	Alpha Brightness	Contrast [Max] 1023 [Min] 0	90/90/90/90/90/90	0-1000	
13	Alpha Color	Brightness [Max] 1023 [Min] 0	140/140/140/140/140/140	0-1000	
14	Alpha Tint	Color [Max] 1023 [Min] 0	10/10/10/10/10/10	0-1000	
15	Alpha Sharpness	Tint [Max] 180 [Min] 0	10/10/10/10/10/10	0-1000	
16	Alpha WB Red	Sharpness [Max] 57 [Min] 0	40/40/40/40/40/40	0-1000	
17	Alpha WB Green	WB R/G/B [Max] 1023 [Min] 0	40/40/40/40/40/40	0-1000	
18	Alpha WB Blue	BB R/G/B [Max] 1023 [Min] 0	40/40/40/40/40/40	0-1000	
19	Alpha BB Red		20/20/20/20/20/20	0-1000	
20	Alpha BB Green		20/20/20/20/20/20	0-1000	
21	Alpha BB Blue		20/20/20/20/20/20	0-1000	
80	FPGA				
0	Software version	FPGA Version Information	Read only		
1	Hardware version	FPGA Version INformation	Read only		
2	Horizontal total		Read only		
3	Vertical total		Read only		
4	Horizontal resolution		Read only		
5	Vertical resolution		Read only		
6	Color manager enable	0:Disable / 1: Enable	1	0-1	
7	Y range		8	0-32	
8	Hue range		15	0-30	
9	Gain range		30	0-50	
10	Min slope		3	0-10	
11	Max slope		18	10-30	
12	Convergence		3	1-5	
13	Same hue		3	1-10	
14	UV normaliz		5	0-64	
15	Min Y		0	0-127	
16	Max Y		255	128-255	
17	Area big change		67	0-4095	
18	Area small change		67	0-4095	
19	Area change sense		150	0-4095	
20	Same Y		24	0-63	
21	Conv Y		64	0-127	
22	WB Limit 0		4	0-255	
23	WB Limit 1		4	0-255	
24	WB Limit 2		6	0-255	
25	WB Limit 3		7	0-255	
26	WB Limit 4		9	0-255	
27	WB Limit 8		16	0-255	
28	UV DLT		3	0-31	
29	UV Gain		1030	0-2047	
30	UV Shift		6180	0-32767	
31	WB Limit Out		16	0-255	
32	WB Limit In		8	0-255	
100	Panel EP7120 Service				
0	ColshdLevel_R		318	0-1023	
1			463	0-1023	
2			575	0-1023	
3			677	0-1023	
4	ColshdLevel_G		319	0-1023	
5			473	0-1023	
6			582	0-1023	
7			681	0-1023	
8	ColshdLevel_B		268	0-1023	
9			442	0-1023	
10			558	0-1023	
11			659	0-1023	

Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
101	Panel EP7120 Service				
0	ReferH_G		0	0-4095	
1	ReferL_G		1280	0-4095	
2	ReferH_R		3264	0-4095	
3	ReferL_R		0	0-4095	
4	ReferH_B		3264	0-4095	
5	ReferL_B		0	0-4095	
6	DXOut_R		34	0-1023	
7	DXOut_G		34	0-1023	
8	DXOut_B		34	0-1023	
9	ENBX_R		10	0-127	
10	ENBX_G		10	0-127	
11	ENBX_B		10	0-127	
12	H_Change_Pos		0	0-256	
13	DXOutPos		1	0-1	
14	SH_Pos		1638	0-4095	
15	SH_Pos_R	Sample&Hold Signal Position Control(R)	6	0-12	
16	SH_Pos_G	Sample&Hold Signal Position Control(G)	6	0-12	
17	SH_Pos_B	Sample&Hold Signal Position Control(B)	6	0-12	
18	NRG_Pos		53	0-127	
19	NRG_Width		13	0-255	
20	FRP_Pos		9	0-255	
21	OSD_Pos		0	0-31	
22	OSD_Ptn		512	0-1023	
23	GammaCtrl		837	0-1023	
24	GammaCtrl_Ena	Gamma Correction 1: Enable / 0: Disable	1	0-1023	
25	GammaCtrl_PreEna	Pre-Gamma Correction 1: Enable / 0: Disable	1	0-1023	
26	REF_GatePos		2	0-1023	
27	REF_GateDur		0	0-1023	
28	BasePos_R		0	0-15	
29	BasePos_G		0	0-15	
30	BasePos_B		0	0-15	
31	RGB_Adjust		0	0-7	
32	RGB_AdjLv		0	0-4095	
33	ColshdCtrl		16	0-511	
34	ColshdCtrl_Ena	Color Shading Correction 1: Enable / 2: Disable	1	0-1	
35	ColshdCtrl_PreEna	Pre-Color Shading Correction 1: Enable / 2: Disable	0	0-1	
36	ColshdPre		0	0-255	
37	Ena_H_Sync		1	0-1	
38	H_OutPos		2	0-2047	
39	OutAreaLv		0	0-4095	
40	H_Sync		0	0-2047	
41	V_Sync		13	0-255	
42	FlickerAdj	Flicker Adjustment Mode On: 0 or 2	0	0-2	* Common Voltage Adj.
43	ENBY_Up01		42	0-255	
44	ENBY_Down01		457	0-1023	
45	ENBY_Up02		42	0-255	
46	ENBY_Down02		457	0-1023	
47	MSEL_Start01		14	0-2047	
48	MSEL_Start02		66	0-2047	
49	MSEL_Start03		106	0-2047	
50	MSEL_Start04		146	0-2047	
51	MSEL_Start05		186	0-2047	
52	MSEL_Start06		226	0-2047	
53	MSEL_Start07		266	0-2047	
54	MSEL_Start08		306	0-2047	
55	MSEL_Start09		346	0-2047	
56	MSEL_Start10		386	0-2047	
57	MSEL_PLS_01		38	0-255	
58	MSEL_PLS_02_9		33	0-255	
59	MSEL_PLS_10		32	0-255	
60	GHST_COEF_R_C		0	0-2047	Min./Max. Cyclic Display
61	GHST_COEF_R_S		128	0-255	
62	GHST_COEF_R_E		128	0-255	
63	GHST_COEF_G_C		0	0-2047	Min./Max. Cyclic Display
64	GHST_COEF_G_S		128	0-255	
65	GHST_COEF_G_E		128	0-255	
66	GHST_COEF_B_C		0	0-2047	Min./Max. Cyclic Display
67	GHST_COEF_B_S		128	0-255	

Group/Item	Item Name	Function	Initial	Range	Note
68	GHST_COEF_B_E		128	0-255	
69	FrontCTalkR_Cent		0	0-2047	Min./Max. Cyclic Display
70	FrontCTalkR_Start		128	0-255	
71	FrontCTalkR_End		128	0-255	
72	FrontCTalkG_Cent		0	0-2047	Min./Max. Cyclic Display
73	FrontCTalkG_Start		128	0-255	
74	FrontCTalkG_End		128	0-255	
75	FrontCTalkB_Cent		0	0-2047	Min./Max. Cyclic Display
76	FrontCTalkB_Start		128	0-255	
77	FrontCTalkB_End		128	0-255	
78	OutputLimitMin_R		0	0-4095	Data Output Limitter Min [R]
79	OutputLimitMin_G		0	0-4095	Data Output Limitter Min [G]
80	OutputLimitMin_B		0	0-4095	Data Output Limitter Min [B]
81	OutputLimitMax_R		4095	0-4095	Data Output Limitter Max [R]
82	OutputLimitMax_G		4095	0-4095	Data Output Limitter Max [G]
83	OutputLimitMax_B		4095	0-4095	Data Output Limitter Max [B]
84	DCOffset_R		0	0-1023	Normal
			0	0-1023	Reversed Left/Right
85	DCOffset_R_01		0 0	0-2047	Normal* Cyclic Display item no 85 to 105 Reversed Left/Right
86	DCOffset_R_02		0 0	0-2047	Normal Reversed Left/Right
87	DCOffset_R_03		2032 0	0-2047	Normal Reversed Left/Right
88	DCOffset_R_04		0 0	0-2047	Normal Reversed Left/Right
89	DCOffset_R_05		0 0	0-2047	Normal Reversed Left/Right
90	DCOffset_R_06		0 2032	0-2047	Normal Reversed Left/Right
91	DCOffset_R_07		0	0-2047	Normal Reversed Left/Right
92	DCOffset_R_08		0 0	0-2047	Normal Reversed Left/Right
93	DCOffset_R_09		0 0	0-2047	Normal Reversed Left/Right
94	DCOffset_R_10		0 0	0-2047	Normal Reversed Left/Right
95	DCOffset_R_11		2032 0	0-2047	Normal Reversed Left/Right
96	DCOffset_R_12		0 0	0-2047	Normal Reversed Left/Right
97	DCOffset_R_13		0 0	0-2047	Normal Reversed Left/Right
98	DCOffset_R_14		0 2032	0-2047	Normal Reversed Left/Right
99	DCOffset_R_15		0 0	0-2047	Normal Reversed Left/Right
100	DCOffset_R_16		0 0	0-2047	Normal Reversed Left/Right
101	DCOffset_R_17		0 0	0-2047	Normal Reversed Left/Right
102	DCOffset_R_18		0 0	0-2047	Normal Reversed Left/Right
103	DCOffset_R_19		2032 0	0-2047	Normal Reversed Left/Right
104	DCOffset_R_20		0 0	0-2047	Normal Reversed Left/Right
105	DCOffset_R_21		0 0	0-2047	Normal Reversed Left/Right
106	DCOffset_R_22		0 2032	0-2047	Normal Reversed Left/Right
107	DCOffset_R_23		0 0	0-2047	Normal Reversed Left/Right
108	DCOffset_R_24		0 0	0-2047	Normal Reversed Left/Right
109	DCOffset_G		0 0	0-1023	Normal Reversed Left/Right
110	DCOffset_G_01		0 0	0-2047	Normal Reversed Left/Right
111	DCOffset_G_02		0 0	0-2047	Normal Reversed Left/Right
112	DCOffset_G_03		0 2032	0-2047	Normal Reversed Left/Right

Group/Item	Item Name	Function	Initial	Range	Note
113	DCOffset_G_04		0 0	0-2047	Normal Reversed Left/Right
114	DCOffset_G_05		0 0	0-2047	Normal Reversed Left/Right
115	DCOffset_G_06		2032 0	0-2047	Normal Reversed Left/Right
116	DCOffset_G_07		0 0	0-2047	Normal Reversed Left/Right
117	DCOffset_G_08		0 0	0-2047	Normal Reversed Left/Right
118	DCOffset_G_09		0 0	0-2047	Normal Reversed Left/Right
119	DCOffset_G_10		0 0	0-2047	Normal Reversed Left/Right
120	DCOffset_G_11		0 2032	0-2047	Normal Reversed Left/Right
121	DCOffset_G_12		0 0	0-2047	Normal Reversed Left/Right
122	DCOffset_G_13		0 0	0-2047	Normal Reversed Left/Right
123	DCOffset_G_14		2032 0	0-2047	Normal Reversed Left/Right
124	DCOffset_G_15		0 0	0-2047	Normal Reversed Left/Right
125	DCOffset_G_16		0 0	0-2047	Normal Reversed Left/Right
126	DCOffset_G_17		0 0	0-2047	Normal Reversed Left/Right
127	DCOffset_G_18		0 0	0-2047	Normal Reversed Left/Right
128	DCOffset_G_19		0 2032	0-2047	Normal Reversed Left/Right
129	DCOffset_G_20		0 0	0-2047	Normal Reversed Left/Right
130	DCOffset_G_21		0 0	0-2047	Normal Reversed Left/Right
131	DCOffset_G_22		2032 0	0-2047	Normal Reversed Left/Right
132	DCOffset_G_23		0 0	0-2047	Normal Reversed Left/Right
133	DCOffset_G_24		0 0	0-2047	Normal Reversed Left/Right
134	DCOffset_B		0 0	0-1023	Normal Reversed Left/Right
135	DCOffset_B_01		0 0	0-2047	Normal Reversed Left/Right
136	DCOffset_B_02		0 0	0-2047	Normal Reversed Left/Right
137	DCOffset_B_03		2032 0	0-2047	Normal Reversed Left/Right
138	DCOffset_B_04		0 0	0-2047	Normal Reversed Left/Right
139	DCOffset_B_05		0 0	0-2047	Normal Reversed Left/Right
140	DCOffset_B_06		0 2032	0-2047	Normal Reversed Left/Right
141	DCOffset_B_07		0 0	0-2047	Normal Reversed Left/Right
142	DCOffset_B_08		0 0	0-2047	Normal Reversed Left/Right
143	DCOffset_B_09		0 0	0-2047	Normal Reversed Left/Right
144	DCOffset_B_10		0 0	0-2047	Normal Reversed Left/Right
145	DCOffset_B_11		2032 0	0-2047	Normal Reversed Left/Right
146	DCOffset_B_12		0 0	0-2047	Normal Reversed Left/Right
147	DCOffset_B_13		0 0	0-2047	Normal Reversed Left/Right
148	DCOffset_B_14		0 2032	0-2047	Normal Reversed Left/Right
149	DCOffset_B_15		0 0	0-2047	Normal Reversed Left/Right
150	DCOffset_B_16		0 0	0-2047	Normal Reversed Left/Right

Group/Item	Item Name	Function	Initial	Range	Note
151	DCOffset_B_17		0 0	0-2047	Normal Reversed Left/Right
152	DCOffset_B_18		0 0	0-2047	Normal Reversed Left/Right
153	DCOffset_B_19		2032 0	0-2047	Normal Reversed Left/Right
154	DCOffset_B_20		0 0	0-2047	Normal Reversed Left/Right
155	DCOffset_B_21		0 0	0-2047	Normal Reversed Left/Right
156	DCOffset_B_22		0 2032	0-2047	Normal Reversed Left/Right
157	DCOffset_B_23		0 0	0-2047	Normal Reversed Left/Right
158	DCOffset_B_24		0 0	0-2047	Normal Reversed Left/Right
102	Panel Service (7200)				
0	SoftRstR		1	0-7	
1	SoftRstG		1	0-7	
2	SoftRstB		1	0-7	
3	SoftRstDisR		0	0-1	
4	SoftRstDisG		0	0-1	
5	SoftRstDisB		0	0-1	
6	OutputDisR		0	0-1	
7	OutputDisG		0	0-1	
8	OutputDisB		0	0-1	
103	Panel Service (9020)				
0	F00_R	R/L, U/D, Data Reversed, DX, DY Reversed	8	0-4095	
1	F00_G		9	0-4095	
2	F00_B		8	0-4095	
3	F02_R	Precharge ON/OFF	1	0-4095	
4	F02_G		1	0-4095	
5	F02_B		1	0-4095	
6	F05_R	Precharge2 Output Setting(+)	4032	0-4095	
7	F05_G		4032	0-4095	
8	F05_B		4032	0-4095	
9	F06_R	Precharge2 Output Setting(+)	3584	0-4095	
10	F06_G		3584	0-4095	
11	F06_B		3584	0-4095	
12	F07_R	Precharge2 Output Setting(-)	1024	0-4095	
13	F07_G		1024	0-4095	
14	F07_B		1024	0-4095	
15	F08_R	Fixed	2048	0-4095	
16	F08_G		2048	0-4095	
17	F08_B		2048	0-4095	
18	F09_R	VCOM Output Voltage Setting	120	0-4095	* Common Voltage Adj. [R]
19	F09_G		120	0-4095	* Common Voltage Adj. [G]
20	F09_B		120	0-4095	* Common Voltage Adj. [B]
21	F0A_R	Number of Outputs	3	0-4095	
22	F0A_G		3	0-4095	
23	F0A_B		3	0-4095	
24	F0E_R	Rotation Order	1	0-4095	
25	F0E_G		1	0-4095	
26	F0E_B		1	0-4095	
27	F0F_R	Rotation Mode	32	0-4095	
28	F0F_G		32	0-4095	
29	F0F_B		32	0-4095	
200	Option				
0	Logo Prohibition	0: Menu / 1: rohibition / 2: China /3-9: not used	0	0-2	
1	RS232C Baudrate	0: 19200bps, 1: 9600bps	0	0-1	
2					
3	Shipping Setting	Sets when the value is set to 10.	0	0-20	
4					
5	PW Debug Command Enable	0: Disable (Serial Command Eanble) 1: Enable (PW Debug Mode)	0	0-1	
6	Device Refresh Disable	0: Enable 1: Disable	0	0-1	
20	Projector Time Reset	Resets when the value is set to 10.	1	0-10	
21	Lamp Warning Time (NORMAL)	Lamp Warning Time at Normal Mode		1-16	

Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
22	Lamp Warning Time (ECO)	Lamp Warning Time at Eco Mode		1-16	
23	Lamp Warning Time (HIGH)	Lamp Warning Time at High Mode		1-16	
30	Lamp life test enable	0:Disable 1:Enable for Test			
31	Lmap On time (for life test)				
32	Lamp Off time (for life test)				
33	Lamp total time (for life test)				
50	Lamp Replacement Display	Lamp Warning Display On/Off 1: On / 0: Off	1	0-1	
51	Filter Warning Display	Filter Warning Display On/Off 1: On / 0: Off	1	0-1	
52	Lamp Counter Reset Times	Lamp Counter Reset Times	0	0-255	
53	Filter Counter Reset Times	Filter Counter Reset Times	0	0-255	
54	Factory Default Execute Times	Factory Default Execute Times	0	0-255	
55	Motor Control	Motors(LensShift, Focus, Zoom)Operation Control 0: Enable / 1: Disable	0	0-1	
56	MenuPosition Change (X)	Offset Value of X	0	0-1024	
57	MenuPosition Change (Y)	Offset Value of Y	0	0-1024	
58	Lamp Go Out		0	0-1	
70	ADC Device Selection Analog	0: ISL51002 / 1: PW392 AFE	0	0-1	
71	ADC Device Selection Component	0: ISL51002 / 1: PW392 AFE	0	0-1	
80	Desitination	Language Set at factory Default 0: English 1: Japanese	0	0-1	
90	Panel Life Mode	0: On / 1: Off	1	0-1	
201	Option (Signals)	Not used			
0	FrameLock Option	Frame Lock Option 0: Normal / 1: Off	0	0-1	
205	Spread Spectrum				
0	Enable	0: On / 1: Off	1	0-1	
1	Spread Ratio		75	0-300	
2	Modulation Frequency		300	200-500	
210	Lamp Contorl				
0	Dimmer SW	0:Auto / 1:Manual	0	0-1	
1	Manual Control		0	0-15	
2	DIMMER_CTRL_LEVEL1	Y Level 1 Data for Dim: Dim Level1	7	0-255	
3	DIMMER_CTRL_LEVEL2	Y Level 1 Data for Dim: Dim Level2	14	0-255	
4	DIMMER_CTRL_LEVEL3	Y Level 1 Data for Dim: Dim Level3	21	0-255	
5	DIMMER_CTRL_LEVEL4	Y Level 1 Data for Dim: Dim Level4	28	0-255	
6	DIMMER_CTRL_LEVEL5	Y Level 1 Data for Dim: Dim Level5	35	0-255	
7	DIMMER_CTRL_LEVEL6	Y Level 1 Data for Dim: Dim Level6	42	0-255	
8	DIMMER_CTRL_LEVEL7	Y Level 1 Data for Dim: Dim Level7	49	0-255	
9	DIMMER_CTRL_LEVEL8	Y Level 1 Data for Dim: Dim Level8	56	0-255	
10	DIMMER_CTRL_LEVEL9	Y Level 1 Data for Dim: Dim Level9	63	0-255	
11	DIMMER_CTRL_LEVEL10	Y Level 1 Data for Dim: Dim Level10	70	0-255	
12	DIMMER_CTRL_LEVEL11	Y Level 1 Data for Dim: Dim Level11	77	0-255	
13	DIMMER_CTRL_LEVEL12	Y Level 1 Data for Dim: Dim Level12	84	0-255	
14	DIMMER_CTRL_LEVEL13	Y Level 1 Data for Dim: Dim Level13	91	0-255	
15	DIMMER_CTRL_LEVEL14	Y Level 1 Data for Dim: Dim Level14	98	0-255	
16	DIMMER_CTRL_LEVEL15	Y Level 1 Data for Dim: Dim Level15	105	0-255	
17	DIMMER_AVERAGE_POINT	Dimmer Avarage Point	4	1-16	
18	DIMMER_AVERAGE_DATA	Dimmer Avarage Data	-	-	
19	DIMMER_LEVEL_AUTO	Dimmer Level Auto	-	-	
20	DIMMER_LEVEL_NORMAL	Dimmer Level Normal	8	0-15	
21	DIMMER_LEVEL_ECO	Dimmer Level Eco	0	0-15	
22	Lamp check enable	Not used	1	0-1	
23	VOLTAGE_LEVEL	Lamp Voltage	-	-	
24	DIMMER_LEVEL_HIGH	Dimmer Level High	15	0-15	
220	Error Logs				
0	Warning_Log_1	Latest Error	0	0-32767	
-	|	|			
49	Warning_Log_50	50th Older Error	0	0-32767	
50	Warning_Log Reset	Resets Error Logs when the value is set to 10.	0	0-10	
250	Fan Voltage Adjustment				

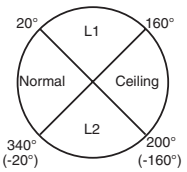
Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
0	Fan1 Min Adjust (DAC)	FAN DAC Output Adjustment DAC and Fan Voltage Tolerance Adjust. * Lamp Mode: Forced Eco	60	0-255	* Fan Volatge Ad.
1	Fan1 Max Adjust (DAC)		210	0-255	* Fan Volatge Ad.
2	Fan2 Min Adjust (DAC)		60	0-255	* Fan Volatge Ad.
3	Fan2 Max Adjust (DAC)		210	0-255	* Fan Volatge Ad.
4	Fan3 Min Adjust (DAC)		60	0-255	* Fan Volatge Ad.
5	Fan3 Max Adjust (DAC)		210	0-255	* Fan Volatge Ad.
6	Fan4 Min Adjust	Not used	4094	0-255	
7	Fan4 Max Adjust	Not used	4095	0-255	
251	Fan Clogging Detection Setting		Normal / Highland		
0	Filter Warning Calibration	Clogging Detection Offset Calibration. Executes Filter Calibration when the value is set to 1.	0	0-1	* Filter Calibration Adj.
1	Filter Warning Offset Point 0	Clogging Detection Offset Value (Freq.)	1731 / 1812	0000-9999	
2	Filter Warning Offset Point 1		2686 / 2818	0000-9999	
3	Filter Warning Offset Point 2		3456 / 3598	0000-9999	
4	Filter Warning Offset Point 3		4139 / 4288	0000-9999	
5	Filter Warning Offset Point 4		4728 / 4948	0000-9999	
6	Filter Warning Offset Point 5		5221 / 5522	0000-9999	
7	Filter Warning Offset Point 6		5607 / 5988	0000-9999	
8	Filter Warning Offset Point 7		5899 / 6332	0000-9999	
9	Not used		9999 / 9999	0000-9999	
10	Not used		9999 / 9999	0000-9999	
11	Not used		9999 / 9999	0000-9999	
12	Not used		9999 / 9999	0000-9999	
13	Filter Warning Times	Clogging Detection Time (min)	3	0-10	
14	Fan-Add Filter Level 1	Fan Rotation Add Value at Clog Level 1(rpm)	1000	0000-9990	
15	Fan-Add Filter Level 2	Fan Rotation Add Value at Clog Level 2(rpm)	2000	0000-9990	
16	Filter Warning Calibration Range	Tlerance of Calibration (1:±5rpm 2:±10rpm 10:±50rpm)	1	0-10	
17	Filter Warning Calibration Time	Calibration Time(sec)	2	1-10	
18	Filter Warning Calibration Error Log	Error Log at Calibration 0: No Error 100-111: Fan Adjustment Error 200-211: Out of Offset Range 255: Not Executed	255	0-255	
19	Filter Warning High Land Calibration Error Log	Error Log at Calibration in the Highland Mode 0: No Error 100-111: Fan Adjustment Error 200-211: Out of Offset Range 255: Not Executed	255	0-255	
20	Filter Warning Calibration Temp	Room Temp. at Calibration Executed (x0.1)	260	-	
21	Filter Warning Inclination Rpm (to 26 ℃)	Add Value of Rotation when the Room Temp increase 10 degree. (Lower than 29 ℃)	60	0000-9999	
22	Filter Warning Inclination Rpm (over 26 ℃)	Add Value of Rotation when the Room Temp increase 10 degree. (Higher than 29 ℃)	80	0000-9999	
23	Filter Warning Add Offset Rpm	Rotation Offset	-	-	
252	Fan Option				
0	Fan Max Switch	0: Normal Operation 1: Fixed Maximum(13.5V)	0	0-1	
1	Safety Switch	FAN Control Switch for Safety Test (0: Normal 1: High Min 2: High Max3: Normal Min 4: Normal Max 5: Eco Min 6: Eco Max)	0	0-6	
2	Fan Manual Switch	Fan Manual SW (0: Auto 1: Mamual)		0-1	
3	Fan1 Manual Voltage	Fan Voltage Manual Adj. Mode (x0.1)		0-255	
4	Fan2 Manual Voltage	* Effective only Manual Switch is 1.		0-255	
5	Fan3 Manual Voltage			0-255	
6	Fan4 Manual Set	PWM Duty Ratio at Manual Adj. * Effective only Manual Switch is 1.		0-511	
7	DAC Out Stability	DAC Output Update Freq. Setting 1: Every 1 sec. 2: 2 sec. 3: 3 sec. 10: 10 sec.	2	1-10	
8	All Fan MaxMin Control	Forced Fan Coltrol Mode The setting is reset when the AC cord is disconnected. 0: Normal Operation 1: High-MIN 2: High-MAX 3: Normal-MIN 4: Normal-MAX 5: Eco1-MIN 6: Eco1-MAX 7: Eco2-MIN 8: Eco2-MAX	0	0-8	

				Norm	Ceiil	L1	L2	
253		Fan Temp. Error Setting	Memorized					
	0	Temp A Warning (High)	Temp A (Room) to judge the Failure at High Mode	47	47	47	47	30-100
	1	Temp B Warning (High)	Temp B (Lamp) to judge the Failure at High Mode	67	67	67	67	30-100
	2	Temp C Warning (High)	Temp C (Panel) to judge the Failure at High Mode	52	52	52	52	30-100
	3	Temp B-A Warning (High)	Temp B-A (Clog) to judge the Failure at High Mode	100	100	100	100	0-100
	4	Temp C-A Warning (High)	Temp C-A (Clog) to judge the Failure at High Mode	100	100	100	100	0-100
	5	Temp A Warning (Normal)	Temp A (Room) to judge the Failure at Normal Mode	47	47	47	47	30-100

Electrical Adjustment

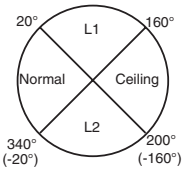
Group/Item	Item Name	Function	Initial				Range	Note
6	Temp B Warning (Normal)	Temp B (Lamp) to judge the Failure at Normal Mode	67	67	67	67	30-100	
7	Temp C Warning (Normal)	Temp C (Panel) to judge the Failure at Normal Mode	52	52	52	52	30-100	
8	Temp B-A Warning (Normal)	Temp B-A (Clog) to judge the Failure at Normal Mode	100	100	100	100	0-100	
9	Temp C-A Warning (Normal)	Temp C-A (Clog) to judge the Failure at Normal Mode	100	100	100	100	0-100	
10	Temp A Warning (Eco)	Temp A (Room) to judge the Failure at Eco Mode	47	47	47	47	30-100	
11	Temp B Warning (Eco)	Temp B (Lamp) to judge the Failure at Eco Mode	67	67	67	67	30-100	
12	Temp C Warning (Eco)	Temp C (Panel) to judge the Failure at Eco Mode	51	51	51	51	30-100	
13	Temp B-A Warning (Eco)	Temp B-A (Clog) to judge the Failure at Eco Mode	100	100	100	100	0-100	
14	Temp C-A Warning (Eco)	Temp C-A (Clog) to judge the Failure at Eco Mode	100	100	100	100	0-100	
15	Temp A Warning Offset (Temp)	Offset of Temp of Temp Error (Temp) Offset Error Temp under the following condition. - In the standby - Startup period of the Lamp-on - Switching period of the Lamp Mode			10		0-100	
16	Temp B Warning Offset (Temp)				11		0-100	
17	Temp C Warning Offset (Temp)				13		0-100	
18	Temp B-A Warning Offset (Temp)				11		0-100	
19	Temp C-A Warning Offset (Temp)				13		0-100	
20	Temp A Warning Offset (Time)	Offset of Temp of Temp Error (min) Offset Error Time under the following condition. - In the standby - Startup period of the Lamp-on - Switching period of the Lamp Mode			30		0-40	
21	Temp B Warning Offset (Time)				15		0-40	
22	Temp C Warning Offset (Time)				15		0-40	
23	Temp B-A Warning Offset (Time)				15		0-40	
24	Temp C-A Warning Offset (Time)				15		0-40	
254	Fan Control Range Setting (Temp/Frequency)		Norm	Ceil	Up	Down		
0	High Fan Control Min Temp	Temp Sensor Control Start/End Temp. at High	30	30	30	30	20-100	
1	High Fan Control Max Temp		39	39	39	39	20-100	
2	High Fan1 Min	Fan Operation Frequency (Min/Max) Setting at High (rpm)	2775	2775	2775	2775	0000-9990	
3	High Fan1 Max		2975	2975	2975	2975	0000-9990	
4	High Fan2 Min		1800	1800	1800	1800	0000-9990	
5	High Fan2 Max		2555	2555	2555	2555	0000-9990	
6	High Fan3 Min		4700	4700	5900	5900	0000-9990	
7	High Fan3 Max		4800	4800	6100	6100	0000-9990	
8	High Fan4 Min		3120	3120	3120	3120	0000-9990	
9	High Fan4 Max		5865	5865	5865	5865	0000-9990	
10	Normal Fan Control Min Temp	Temp Sensor Control Start/End Temp. at Normal	30	30	30	30	20-100	
11	Normal Fan Control Max Temp		39	39	39	39	20-100	
12	Normal Fan1 Min	Fan Operation Frequency (Min/Max) Setting at Normal (rpm)	2495	2495	2495	2495	0000-9990	
13	Normal Fan1 Max		2795	2795	2795	2795	0000-9990	
14	Normal Fan2 Min		1625	1625	1625	1625	0000-9990	
15	Normal Fan2 Max		2245	2245	2245	2245	0000-9990	
16	Normal Fan3 Min		3650	3650	4850	4850	0000-9990	
17	Normal Fan3 Max		3725	3725	5000	5000	0000-9990	
18	Normal Fan4 Min		2605	2605	2605	2605	0000-9990	
19	Normal Fan4 Max		5275	5275	5275	5275	0000-9990	
20	Eco Fan Control Min Temp	Temp Sensor Control Start/End Temp. at Eco	30	30	30	30	20-100	
21	Eco Fan Control Max Temp		39	39	39	39	20-100	
22	Eco Fan1 Min	Fan Operation Frequency (Min/Max) Setting at Eco (rpm)	2210	2210	2210	2210	0000-9990	
23	Eco Fan1 Max		2610	2610	2610	2610	0000-9990	
24	Eco Fan2 Min		1450	1450	1450	1450	0000-9990	
25	Eco Fan2 Max		1935	1935	1935	1935	0000-9990	
26	Eco Fan3 Min		2600	2600	3800	3800	0000-9990	
27	Eco Fan3 Max		2650	2650	3900	3900	0000-9990	
28	Eco Fan4 Min		2090	2090	2090	2090	0000-9990	
29	Eco Fan4 Max		4685	4685	4685	4685	0000-9990	
255	Fan Start/Cooling Setting							
0	Fan1 Initial Volt	Fan Start Voltage (x0.1)			55		0-255	
1	Fan2 Initial Volt				65		0-255	
2	Fan3 Initial Volt				35		0-255	
3	Fan4 Initial Pulse	Fan Start Output			700		0-4095	
4								
5								
6								
7								
8	Cooling Time	Cooling Time Setting (x30) 1: 30, 3: 90, 15: 45 sec.			3		1-15	
9								
10	Temp Error Cooling Time	Cooling Setting at Temp Error (x30) 1: 30, 3: 90, 15: 45 sec.			3		1-15	
11	OnStaart Cooling Start Threshold				38		0-100	
12	After shutdown cooling	0: No, 1: Yes			1		0-1	
256	Fan Lamp Voltage Setting							



Ceiling \ Slant	Off	L1	L2
Off	Normal	Up	Down
On	Ceiling	Up	Down

Definition of Slant

Off	-20° ~ 20°
L1	20° ~ 160°
L2	-20° ~ -160°



Ceiling \ Slant	Off	L1	L2
Off	Normal	Up	Down
On	Ceiling	Up	Down

Definition of Slant

Off	-20° ~ 20°
L1	20° ~ 160°
L2	-20° ~ -160°

Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
0	Lamp Voltage	Current Lamp Voltage (V)	---	0-255	
1	Lamp Vol Threshold	Voltage to judge the lower voltage (V)	30	30-90	
2	Fan1 Speed Gain		300	0-1500	
257	Fan Setting at Dimmer				
0	Dimmer Average Check Period	Check Period of Avarage Dimmer 0: 10, 1: 30, 2: 60, 3: 90 … 10: 300 sec.	1	0-10	
260	Auto Calibration				
0	Execute Calibration	Executes Auto Calibration when the value is changed. (For PC White 100%)	0	0-1	* Auto Calibration Adj.
1	Loop Count		8	1-30	
2	Auto Status	Result of the Auto Calibration 0: End normally, 1: Adjusting, 9: Error	0	0 / 1 / 9	
3	AutoWait		3	1-20	
4	CHECK-Tolerance		4	1-255	
5	Time out wait		20	1-255	
261	Auto Calibration (RGB)				
0	OFFSET AREA H START		975	0-1000	
1	OFFSET AREA V START		500	0-1000	
2	GAIN AREA H START		25	0-1000	
3	GAIN AREA V START		500	0-1000	
4	Image AREA H WIDTH		13	0-4095	
5	Image AREA V HIGHT		9	0-4095	
6	OFFSET Target		20	0-1023	
7	OFFSET Tolerance		1	1-1023	
8	GAIN Target		955	0-1023	
9	GAIN Tolerance		1	1-1023	
10	Image Level Tolerance		2	1-255	
262	Auto Calibration (CVBS/SVIDEO)				
0	Y Image Area Start X		20	0-1000	
1	Y Image Area Start Y		200	0-1000	
6	Image Area H Width		8	0-4095	
7	Image Area V Hight		9	0-4095	
8	Y Target Level		875	0-1023	
11	Gain Tolerance		1	1-255	
12	Image Level Tolerance		2	1-255	
264	Auto Calibration (YCbCr)				
0	Y-OFFSET AREA H START		925	0-1000	
1	Y-OFFSET AREA V START		500	0-1000	
2	CB-OFFSET AREA H START		925	0-1000	
3	CB-OFFSET AREA V START		500	0-1000	
4	CR-OFFSET AREA H START		925	0-1000	
5	CR-OFFSET AREA V START		500	0-1000	
6	Y-GAIN AREA H START		50	0-1000	
7	Y-GAIN AREA V START		500	0-1000	
8	CB-GAIN AREA H START		800	0-1000	
9	CB-GAIN AREA V START		500	0-1000	
10	CR-GAIN AREA H START		700	0-1000	
11	CR-GAIN AREA V START		500	0-1000	
12	Image AREA H WIDTH		13	0-4095	
13	Image AREA V HIGHT		9	0-4095	
14	Y-OFFSET TARTGET		4	0-1023	
15	CB OFFSET TARGET		512	0-1023	
16	CR OFFSET TARGET		512	0-1023	
17	Y-GAIN TARGET		810	0-1023	
18	CB-GAIN TARGET		894	0-1023	
19	CR-GAIN TARGET		894	0-1023	
20	OFFSET Tolerance		1	1-255	
21	GAIN Tolerance		1	1-255	
22	Image Level Tolerance		2	1-255	
280	AutoPC Adjsut				
0	AutoPCAdjustEnable		0	0-1	
1	Frequency Step		1	0-3	
2	Frequency Threshold		5	0-10	
3	Fine Phase		1	0-1	
4	BLKDET		1	0-7	
5	PHASEMSK		0	0-3	

Electrical Adjustment

Group/Item		Item Name	Function	Initial	Range	Note
500		Composite (NTSC)	Composite / S-Video			
	1	Disp Dots		674	0-4095	
	2	H Back Porch		24	0-4095	
	3	V Back Porch		18	0-4095	
	4	Disp Line		456	0-4095	
501		Composite (PAL)	Composite / S-Video			
	1	Disp Dots		662	0-4095	
	2	H Back Porch		32	0-4095	
	3	V Back Porch		18	0-4095	
	4	Disp Line		542	0-4095	
502		Composite (SECAM)	Composite / S-Video			
	1	Disp Dots		662	0-4095	
	2	H Back Porch		33	0-4095	
	3	V Back Porch		16	0-4095	
	4	Disp Line		542	0-4095	
510		SCART(480i)				
	1	Disp Dots		668	0-4095	
	2	H Back Porch		139	0-4095	
	3	V Back Porch		42	0-4095	
	4	Disp Line		456	0-4095	
511		SCART (575i)				
	1	Disp Dots		656	0-4095	
	2	H Back Porch		150	0-4095	
	3	V Back Porch		55	0-4095	
	4	Disp Line		544	0-4095	
520		YCbCr (480i)				
	0	Total Dots		1716	0-4095	
	1	Disp Dots		1346	0-4095	
	2	H Back Porch		288	0-4095	
	3	V Back Porch		47	0-4095	
	4	Disp Line		456	0-4095	
	5	Clamp		1	0-255	
	6	Clamp Width		31	0-255	
521		YCbCr (575i)				
	0	Total Dots		1728	0-4095	
	1	Disp Dots		1318	0-4095	
	2	H Back Porch		324	0-4095	
	3	V Back Porch		61	0-4095	
	4	Disp Line		542	0-4095	
	5	Clamp		1	0-255	
	6	Clamp Width		31	0-255	
522		YCbCr (480P)				
	0	Total Dots		1716	0-4095	
	1	Disp Dots		1368	0-4095	
	2	H Back Porch		276	0-4095	
	3	V Back Porch		48	0-4095	
	4	Disp Line		458	0-4095	
	5	Clamp		1	0-255	
	6	Clamp Width		31	0-255	
523		YCbCr (575P)				
	0	Total Dots		1728	0-4095	
	1	Disp Dots		1360	0-4095	
	2	H Back Porch		300	0-4095	
	3	V Back Porch		60	0-4095	
	4	Disp Line		544	0-4095	
	5	Clamp		1	0-255	
	6	Clamp Width		31	0-255	
524		YCbCr (720P-60)				
	0	Total Dots		1850	0-4095	
	1	Disp Dots		1400	0-4095	

Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
2	H Back Porch		346	0-4095	
3	V Back Porch		35	0-4095	
4	Disp Line		700	0-4095	
5	Clamp		110	0-255	
6	Clamp Width		31	0-255	
525	YCbCr (720P-50)				
0	Total Dots		2220	0-4095	
1	Disp Dots		1400	0-4095	
2	H Back Porch		345	0-4095	
3	V Back Porch		35	0-4095	
4	Disp Line		700	0-4095	
5	Clamp		110	0-255	
6	Clamp Width		31	0-255	
526	YCbCr (1080i-60)				
0	Total Dots		2200	0-4095	
1	Disp Dots		1872	0-4095	
2	H Back Porch		252	0-4095	
3	V Back Porch		55	0-4095	
4	Disp Line		1050	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	
527	YCbCr (1080i-50)				
0	Total Dots		2640	0-4095	
1	Disp Dots		1872	0-4095	
2	H Back Porch		252	0-4095	
3	V Back Porch		55	0-4095	
4	Disp Line		1050	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	
528	YCbCr (1035i)				
0	Total Dots		2200	0-4095	
1	Disp Dots		1872	0-4095	
2	H Back Porch		252	0-4095	
3	V Back Porch		93	0-4095	
4	Disp Line		1008	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	
529	YCbCr (1080P-60)				
0	Total Dots		2200	0-4095	
1	Disp Dots		1872	0-4095	
2	H Back Porch		255	0-4095	
3	V Back Porch		52	0-4095	
4	Disp Line		1052	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	
530	YCbCr (1080P-50)				
0	Total Dots		2640	0-4095	
1	Disp Dots		1868	0-4095	
2	H Back Porch		258	0-4095	
3	V Back Porch		52	0-4095	
4	Disp Line		1052	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	
540	RGB Video (480i)				
0	Total Dots		1786	0-4095	
1	Disp Dots		1400	0-4095	
2	H Back Porch		306	0-4095	
3	V Back Porch		46	0-4095	
4	Disp Line		460	0-4095	
5	Clamp		1	0-255	
6	Clamp Width		31	0-255	
541	RGB Video (575i)				

Electrical Adjustment

Group/Item	Item Name	Function	Initial	Range	Note
0	Total Dots		1834	0-4095	
1	Disp Dots		1400	0-4095	
2	H Back Porch		344	0-4095	
3	V Back Porch		64	0-4095	
4	Disp Line		536	0-4095	
5	Clamp		1	0-255	
6	Clamp Width		31	0-255	
542	RGB Video (480P)				
0	Total Dots		1754	0-4095	
1	Disp Dots		1400	0-4095	
2	H Back Porch		282	0-4095	
3	V Back Porch		45	0-4095	
4	Disp Line		460	0-4095	
5	Clamp		1	0-255	
6	Clamp Width		31	0-255	
543	RGB Video (575P)				
0	Total Dots		1778	0-4095	
1	Disp Dots		1400	0-4095	
2	H Back Porch		311	0-4095	
3	V Back Porch		61	0-4095	
4	Disp Line		540	0-4095	
5	Clamp		1	0-255	
6	Clamp Width		31	0-255	
544	RGB Video (720P-60)				
0	Total Dots		1848	0-4095	
1	Disp Dots		1400	0-4095	
2	H Back Porch		344	0-4095	
3	V Back Porch		33	0-4095	
4	Disp Line		702	0-4095	
5	Clamp		110	0-255	
6	Clamp Width		31	0-255	
545	RGB Video (720P-50)				
0	Total Dots		2222	0-4095	
1	Disp Dots		1400	0-4095	
2	H Back Porch		342	0-4095	
3	V Back Porch		33	0-4095	
4	Disp Line		702	0-4095	
5	Clamp		110	0-255	
6	Clamp Width		31	0-255	
546	RGB Video (1080i-60)				
0	Total Dots		2200	0-4095	
1	Disp Dots		1872	0-4095	
2	H Back Porch		254	0-4095	
3	V Back Porch		54	0-4095	
4	Disp Line		1052	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	
547	RGB Video (1080i-50)				
0	Total Dots		2640	0-4095	
1	Disp Dots		1868	0-4095	
2	H Back Porch		257	0-4095	
3	V Back Porch		54	0-4095	
4	Disp Line		1052	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	
548	RGB Video (1035i)				
0	Total Dots		2200	0-4095	
1	Disp Dots		1868	0-4095	
2	H Back Porch		257	0-4095	
3	V Back Porch		90	0-4095	
4	Disp Line		1012	0-4095	
5	Clamp		80	0-255	
6	Clamp Width		31	0-255	

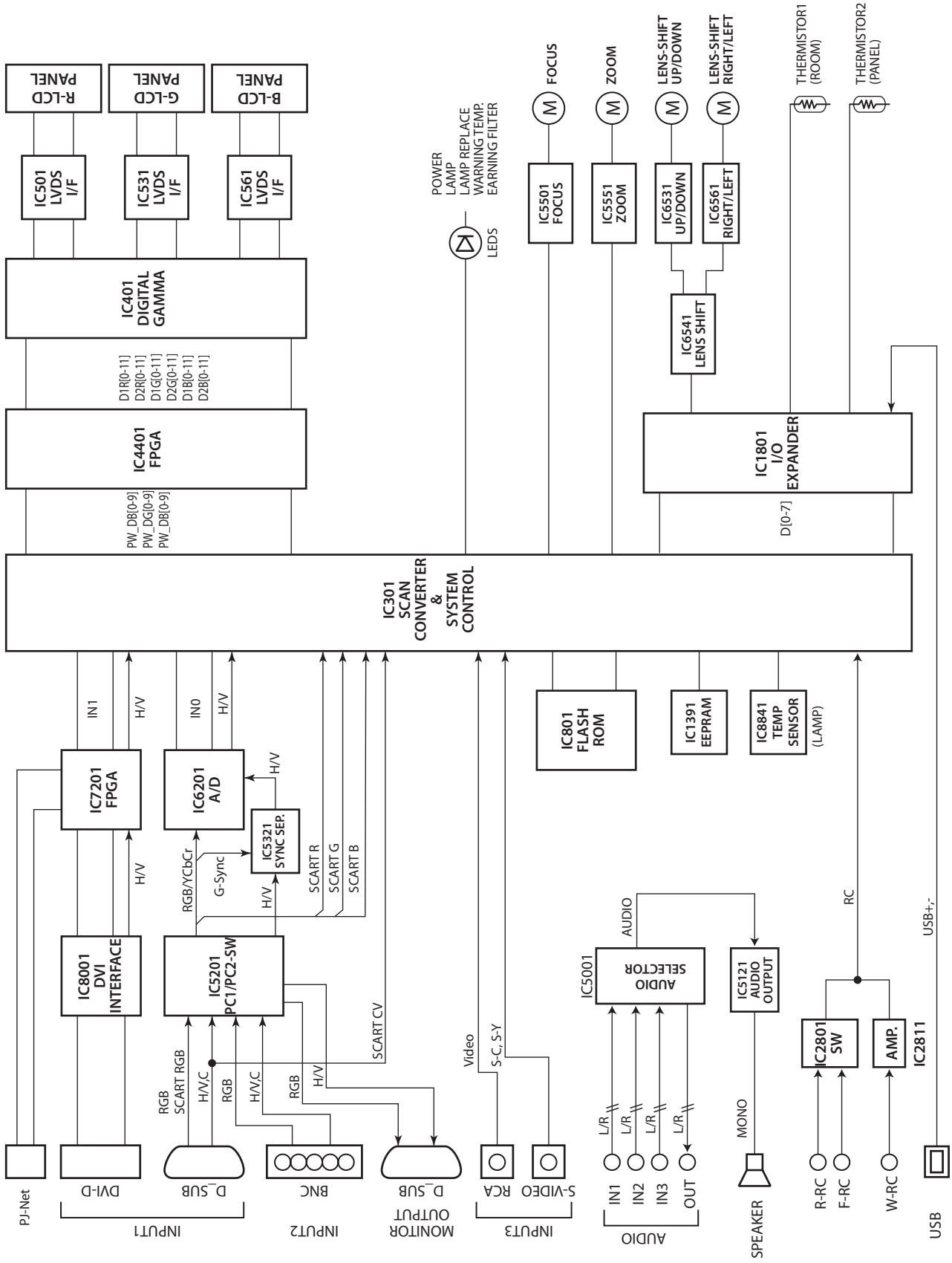
Electrical Adjustment

Group/Item		Item Name	Function	Initial	Range	Note
549		RGB Video (1080P-60)				
	0	Total Dots		2200	0-4095	
	1	Disp Dots		1872	0-4095	
	2	H Back Porch		254	0-4095	
	3	V Back Porch		54	0-4095	
	4	Disp Line		1052	0-4095	
	5	Clamp		80	0-255	
	6	Clamp Width		31	0-255	
550		RGB Video (1080P-50)				
	0	Total Dots		2640	0-4095	
	1	Disp Dots		1868	0-4095	
	2	H Back Porch		253	0-4095	
	3	V Back Porch		54	0-4095	
	4	Disp Line		1052	0-4095	
	5	Clamp		80	0-255	
	6	Clamp Width		31	0-255	
551		RGB Video (1080P-30)				
	0	Total Dots		2200	0-4095	
	1	Disp Dots		1868	0-4095	
	2	H Back Porch		263	0-4095	
	3	V Back Porch		48	0-4095	
	4	Disp Line		1066	0-4095	
	5	Clamp		80	0-255	
	6	Clamp Width		31	0-255	
552		RGB Video (1080P-25)				
	0	Total Dots		2640	0-4095	
	1	Disp Dots		1872	0-4095	
	2	H Back Porch		261	0-4095	
	3	V Back Porch		49	0-4095	
	4	Disp Line		1064	0-4095	
	5	Clamp		80	0-255	
	6	Clamp Width		31	0-255	
553		RGB Video (1080P-24)				
	0	Total Dots		2750	0-4095	
	1	Disp Dots		1878	0-4095	
	2	H Back Porch		259	0-4095	
	3	V Back Porch		46	0-4095	
	4	Disp Line		1070	0-4095	
	5	Clamp		80	0-255	
	6	Clamp Width		31	0-255	
930		Auto Gamma				
	0	GAM_CALC_STATUS		0	1	Result of Auto Gamma
982		Auto Gamma Adjustment	Parameter Setting			* White Balance Adj.
	0	PC Dynamic: LVL_USE	(x0.01)	100	1-999	
	1	PC Dynamic: W_SXY_0	(x0.001)	285	0-999	
	2	PC Dynamic: W_SXY_1	(x0.001)	315	0-999	
	3	PC Dynamic: B_SXY_0	(x0.001)	285	0-999	
	4	PC Dynamic: B_SXY_1	(x0.001)	315	0-999	
	5	PC Dynamic: LIMIT_CONTRAST		5000	100-5000	
	6	PC Dynamic: CAL_CONT	RESULT CONTRAST	---	-	
	7	PC Dynamic: CONT_USE	(x0.001)	1000	100-5000	
	12	PC Standard: LVL_USE	(x0.01)	100	1-999	
	13	PC Standard: W_SXY_0	(x0.001)	290	0-999	
	14	PC Standard: W_SXY_1	(x0.001)	325	0-999	
	15	PC Standard: B_SXY_0	(x0.001)	290	0-999	
	16	PC Standard: B_SXY_1	(x0.001)	325	0-999	
	17	PC Standard: LIMIT_CONTRAST		5000	100-5000	
	18	PC Standard: CAL_CONT	RESULT CONTRAST	---	-	
	19	PC Standard: CONT_USE	(x0.001)	1000	100-5000	
	24	PC Real: LVL_USE	(x0.01)	90	1-999	
	25	PC Real: W_SXY_0	(x0.001)	300	0-999	
	26	PC Real: W_SXY_1	(x0.001)	332	0-999	
	27	PC Real: B_SXY_0	(x0.001)	300	0-999	

Electrical Adjustment

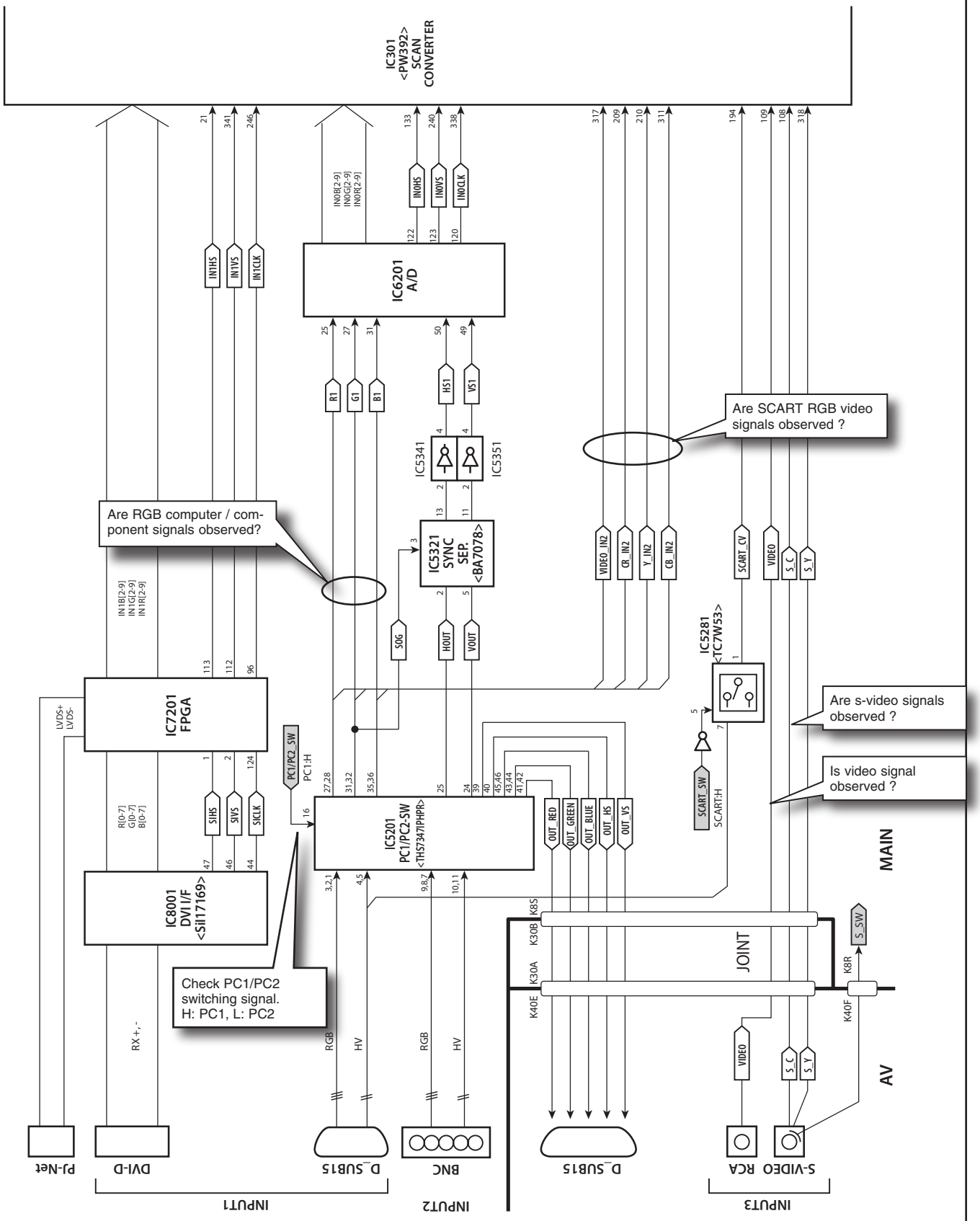
Group/Item	Item Name	Function	Initial	Range	Note
28	PC Real: B_SXY_1	(x0.001)	332	0-999	
29	PC Real: LIMIT_CONTRAST		5000	100-5000	
30	PC Real: CAL_CONT	RESULT CONTRAST	---	-	
31	PC Real: CONT_USE	(x0.001)	1000	100-5000	
36	AV Dynamic: LVL_USE	(x0.01)	100	1-999	
37	AV Dynamic: W_SXY_0	(x0.001)	287	0-999	
38	AV Dynamic: W_SXY_1	(x0.001)	310	0-999	
39	AV Dynamic: B_SXY_0	(x0.001)	287	0-999	
40	AV Dynamic: B_SXY_1	(x0.001)	310	0-999	
41	AV Dynamic: LIMIT_CONTRAST		5000	100-5000	
42	AV Dynamic: CAL_CONT	RESULT CONTRAST	---	-	
43	AV Dynamic: CONT_USE	(x0.001)	1000	100-5000	
48	AV Standard: LVL_USE	(x0.01)	95	1-999	
49	AV Standard: W_SXY_0	(x0.001)	300	0-999	
50	AV Standard: W_SXY_1	(x0.001)	325	0-999	
51	AV Standard: B_SXY_0	(x0.001)	300	0-999	
52	AV Standard: B_SXY_1	(x0.001)	325	0-999	
53	AV Standard: LIMIT_CONTRAST		5000	100-5000	
54	AV Standard: CAL_CONT	RESULT CONTRAST	---	-	
55	AV Standard: CONT_USE	(x0.001)	1000	100-5000	
60	AV Cinema: LVL_USE	(x0.01)	90	1-999	
61	AV Cinema: W_SXY_0	(x0.001)	310	0-999	
62	AV Cinema: W_SXY_1	(x0.001)	335	0-999	
63	AV Cinema: B_SXY_0	(x0.001)	310	0-999	
64	AV Cinema: B_SXY_1	(x0.001)	335	0-999	
65	AV Cinema: LIMIT_CONTRAST		5000	100-5000	
66	AV Cinema: CAL_CONT	RESULT CONTRAST	---	-	
67	AV Cinema: CONT_USE	(x0.001)	1000	100-5000	
72	Auto Gamma CALC	Executes Auto Gamma Calculate when the value is set to 10.	0	0-10	
73	Auto Gamma CALC MODE	Algorithm Setting	0	0-1	0: Normal

Chassis over view



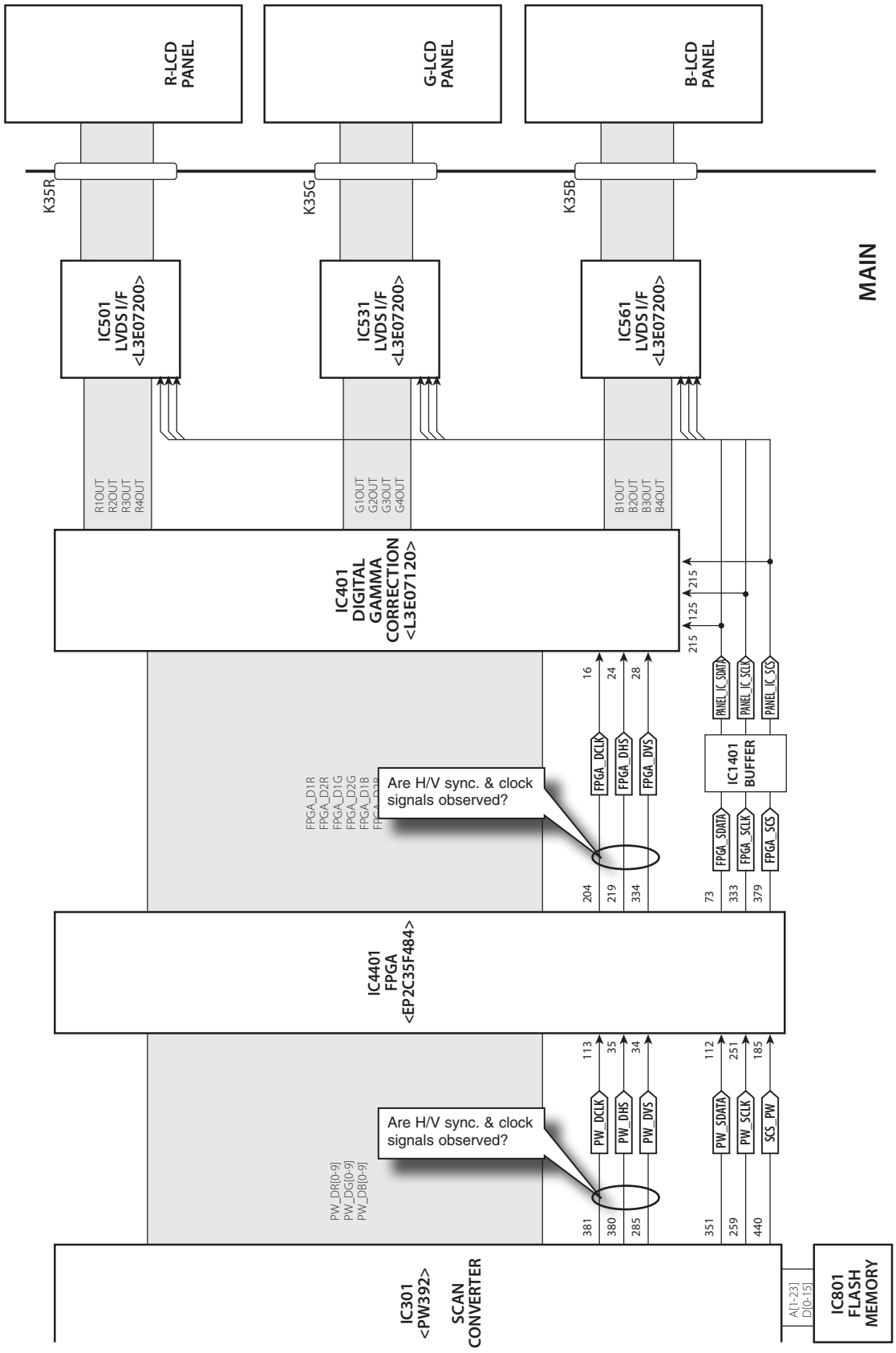
No Picture

(Check input & signal processing stage)



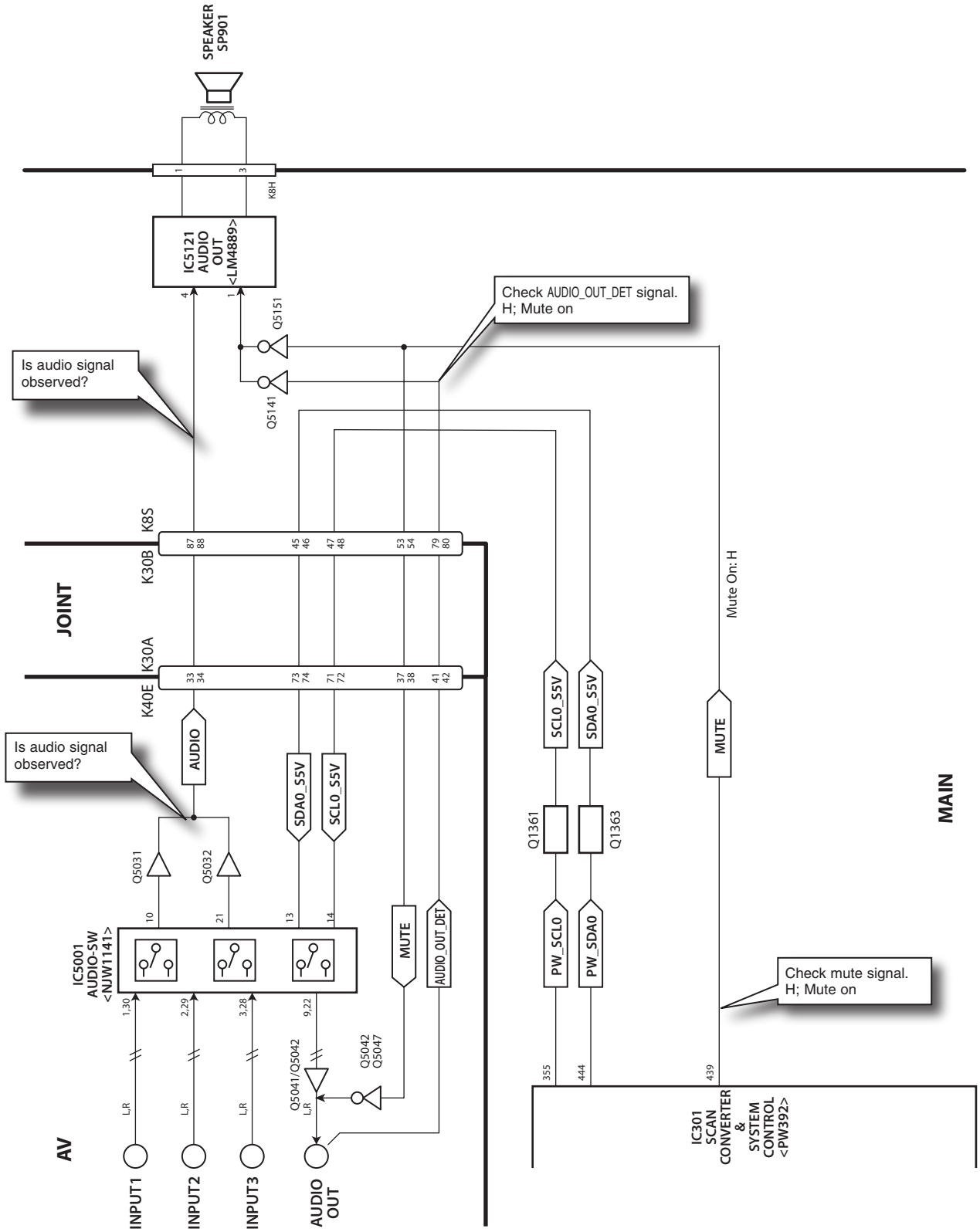
No Picture

(Check LCD drive stage)



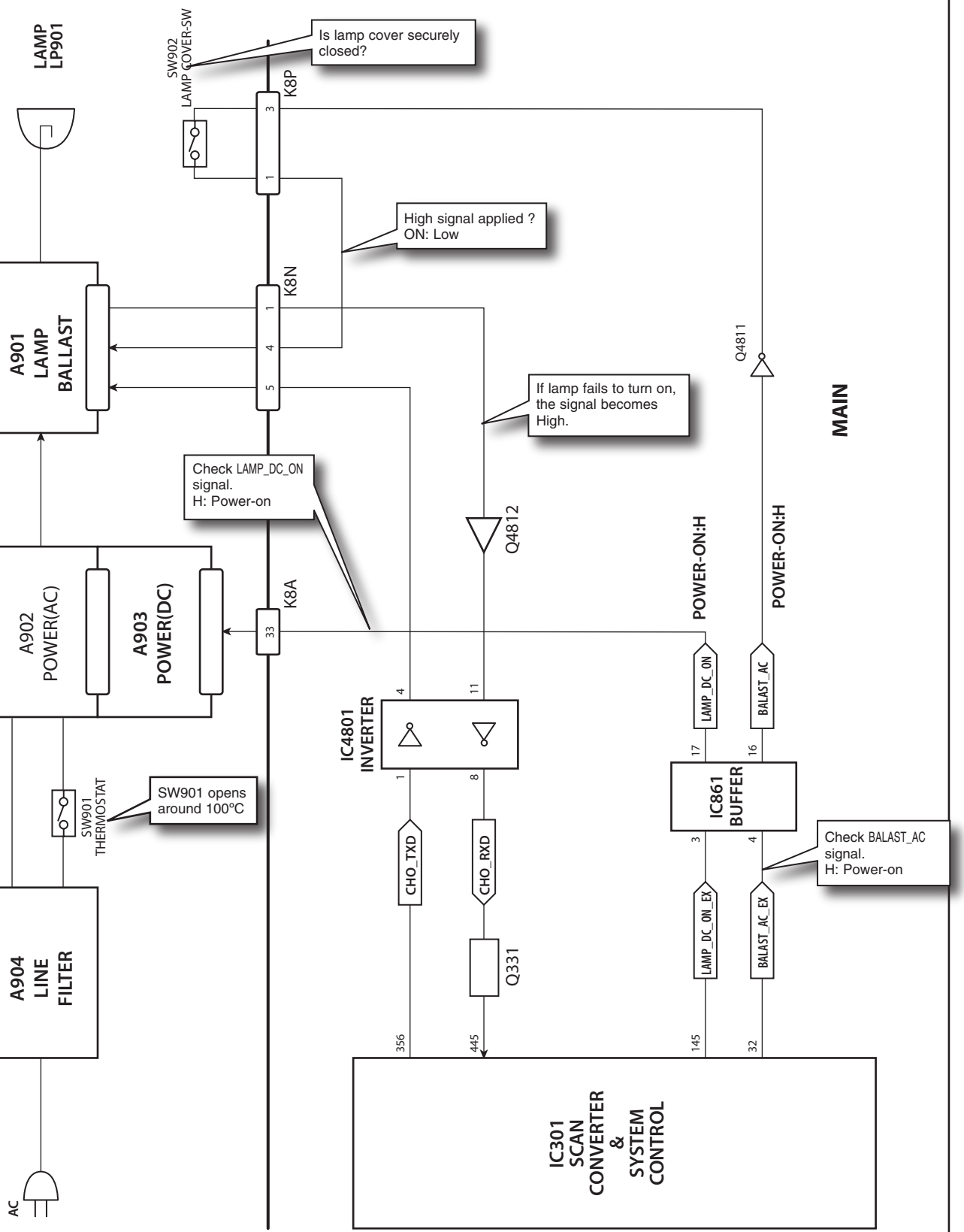
No Sound

(Check audio signal processing stage)



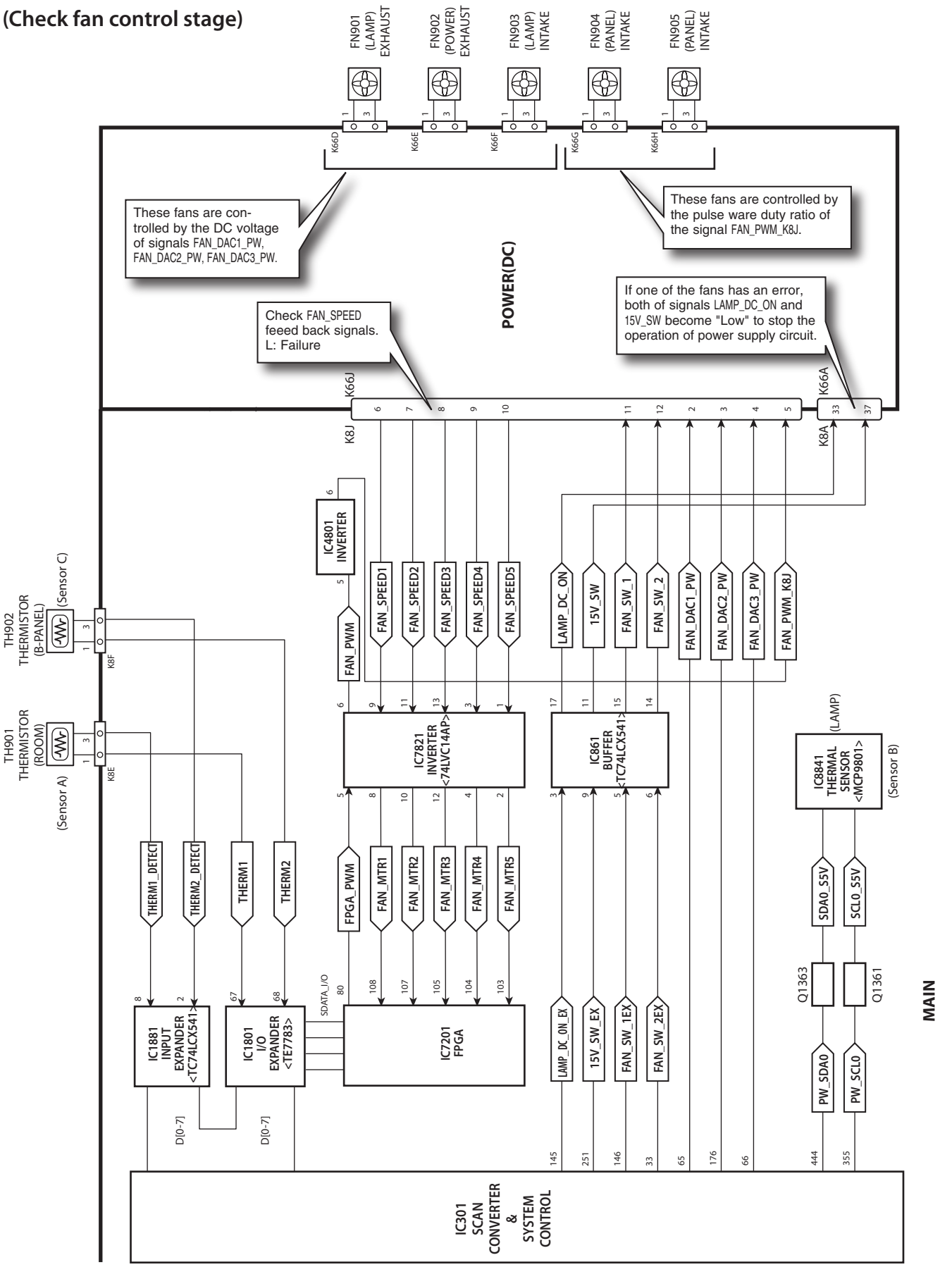
No Power

(Check lamp control stage)



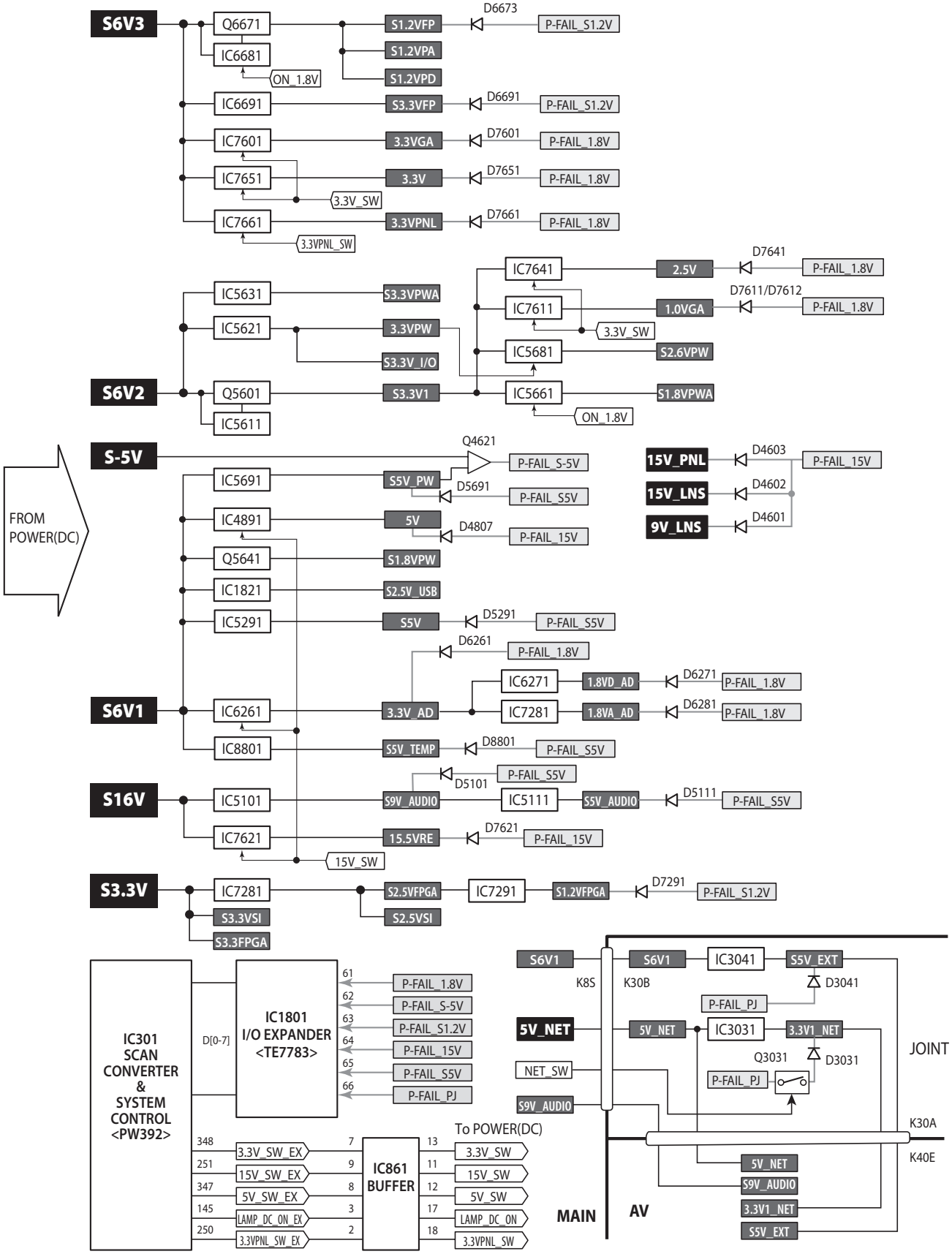
No Power

(Check fan control stage)

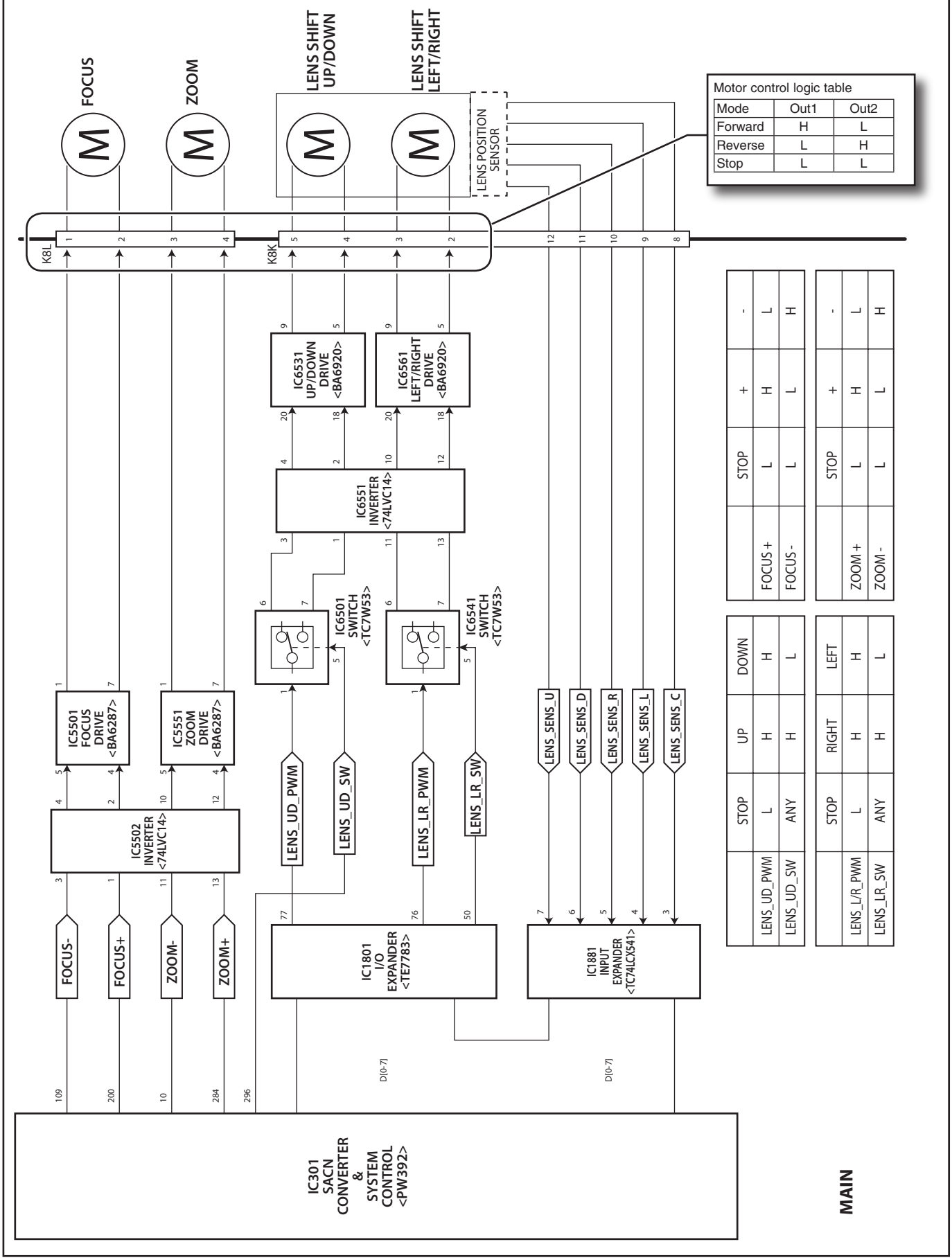


No Power

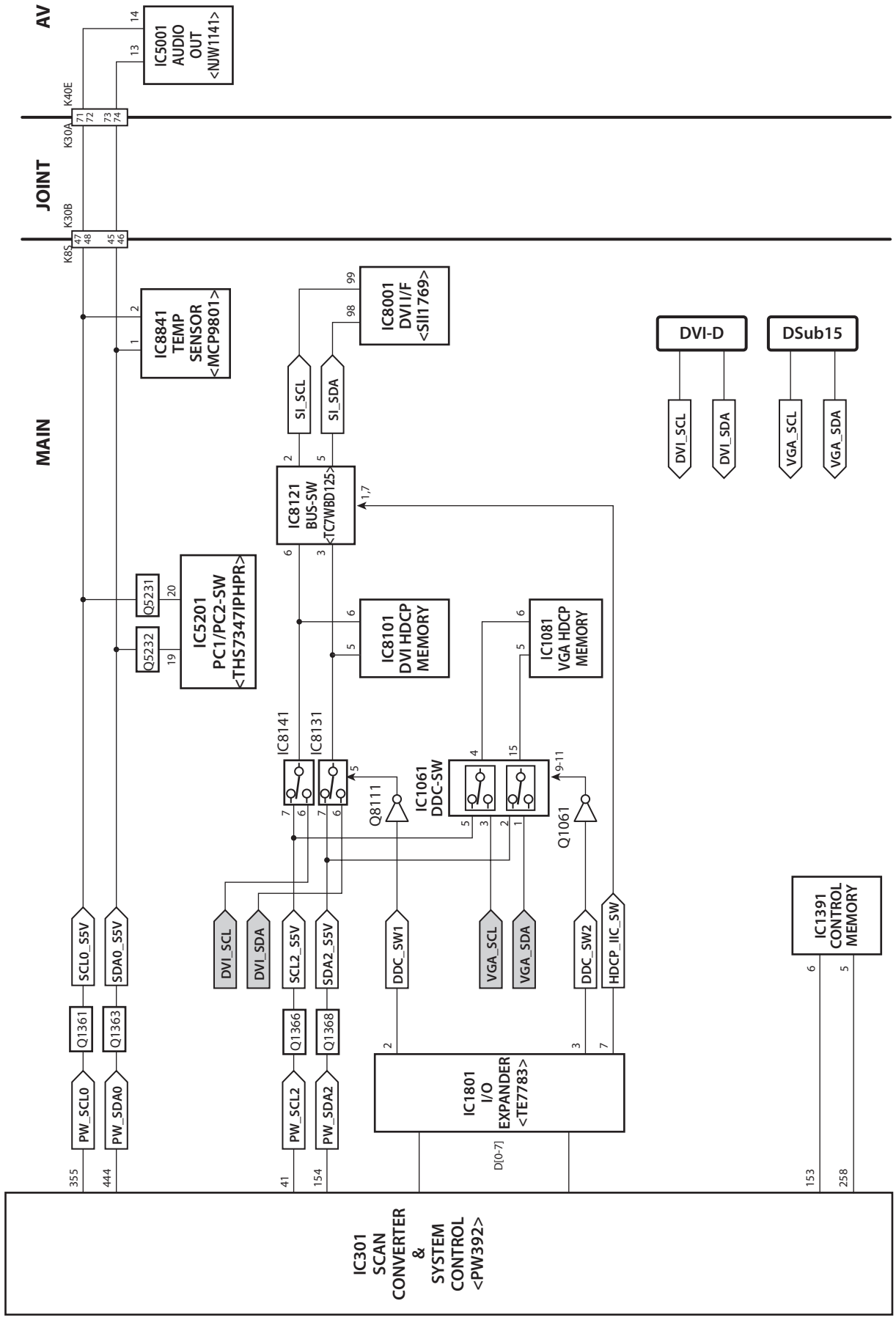
(Check power supply & power failure detection circuit)



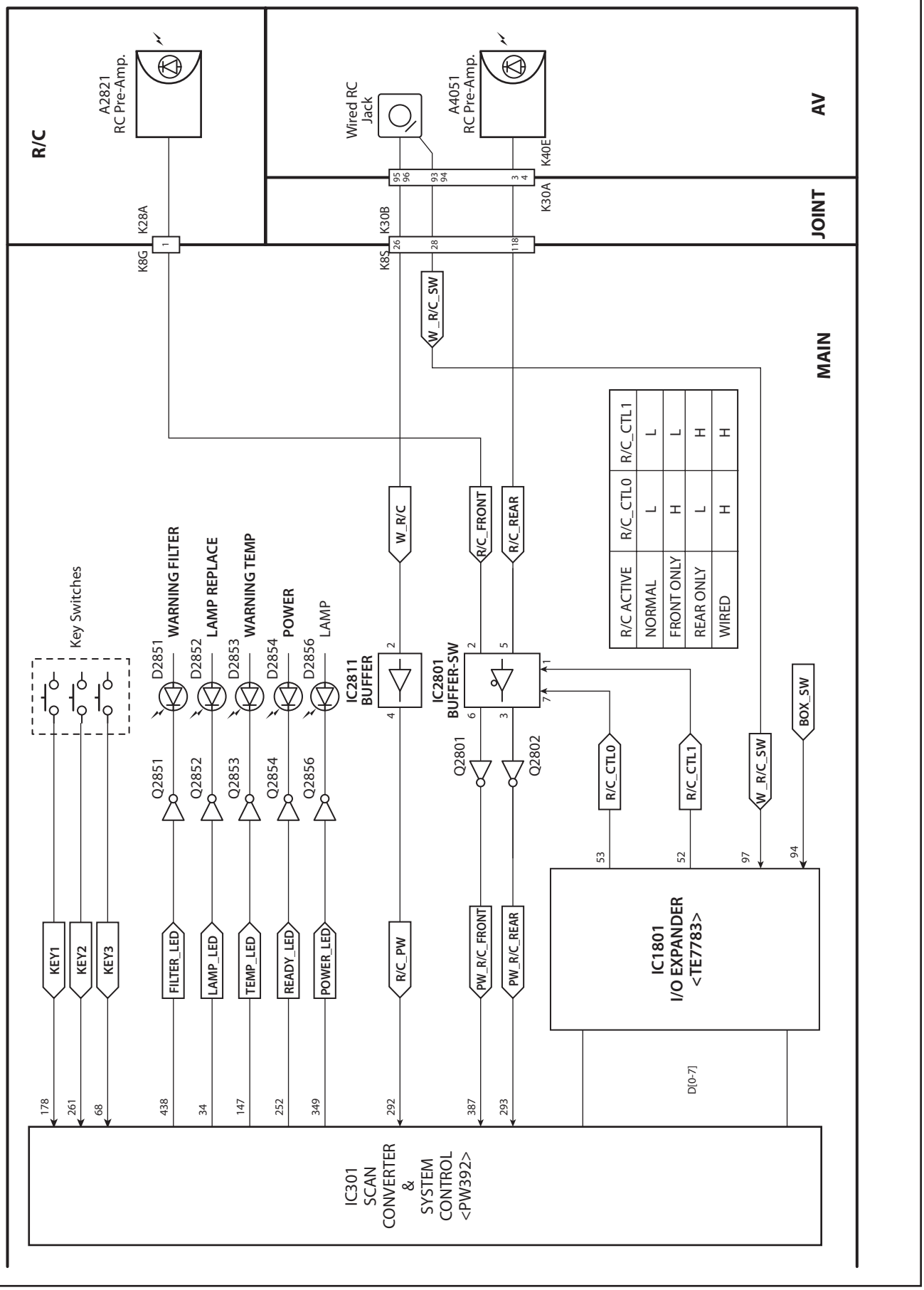
Motor Control Problems



Bus control


AV
JOINT
MAIN
IC5001 AUDIO OUT <NJW1141>
K40E
K30A
K30B
K8S
IC8841 TEMP SENSOR <MCP9801>
IC8001 DVI I/F <SII1769>
DVI-D
DSub15
DVI_SCL
DVI_SDA
VGA_SCL
VGA_SDA
SI_SCL
SI_SDA
IC8121 BUS-SW <TC7WBD125>
IC5201 PC1/PC2-SW <THS7347IPHPR>
Q5231
Q5232
IC8101 DVI HDCP MEMORY
IC1081 VGA HDCP MEMORY
IC8141
IC8131
IC1061 DDC-SW
Q8111
Q1061
SCL0_5V
SDA0_5V
SCL2_5V
SDA2_5V
DDC_SW1
DDC_SW2
HDCP_IIC_SW
Q1361
Q1363
Q1366
Q1368
PW_SCL0
PW_SDA0
PW_SCL2
PW_SDA2
IC1801 I/O EXPANDER <TE7783>
D[0-7]
IC1391 CONTROL MEMORY
IC301 SCAN CONVERTER & SYSTEM CONTROL <PW392>

LED drive & RC control



Indicators and Projector Condition

Check the indicators for projector condition.

WARNING TEMP. indicator

Indicators			Projector Condition
POWER green	LAMP red	WARNING TEMP. red	
●	●	●	The projector is off. (The AC power cord is unplugged.)
○	●	●	The projector is in stand-by mode. Press the ON/STAND-BY button to turn on the projector.
○	○	●	The projector is operating normally.
⁘	○	●	The projector is in the Power management mode.
⁘	●	●	The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed and the POWER indicator stops blinking.
○	○	⁘	The WARNING TEMP. indicator blinks slow when the temperature inside the projector is elevated close to the abnormally high level.
⁘	●	⁘	The temperature inside the projector is abnormally high. The projector cannot be turned on. When the projector is cooled down enough and the temperature returns to normal, the POWER indicator stops blinking and the projector can be turned on. (The WARNING TEMP. indicator keeps blinking.) Check and clean the filter.
○	●	⁘	The projector has been cooled down enough and the temperature returns to normal. When turning on the projector, the WARNING TEMP. indicator stops blinking. Check and clean the filter.
POWER, LAMP, WARNING TEMP., WARNING FILTER, and LAMP REPLACE indicators are blinking all together.		⁘	The projector detects an abnormal condition and cannot be turned on. Unplug the AC power cord and plug it again to turn on the projector. If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center. Do not leave the projector on. It may cause an electric shock or a fire hazard.

○ • • • lighting. ⁘ • • • blinking ● • • • off

WARNING FILTER indicator

Indicators			Projector Condition
POWER green	LAMP red	WARNING FILTER orange	
○	○	☼	The filter is clogged. Stop using the projector immediately and clean or replace the filter (see below).
Filter warning red icon			
--	--	○	The Filter counter reached a set time. Clean or replace the filter as soon as possible.
Filter warning yellow icon			

If filter clogging is detected during operations, the Filter warning icon (red) appears on the screen and the WARNING FILTER indicator blinks orange, urging you to clean or replace the filter. Stop using the projector immediately and clean or replace the filter. The WARNING FILTER indicator and Filter warning icon will not be turned off until the filter is cleaned or replaced by a new one.

Filter warning icon (red) appears on the screen when the projector detects filter clogging.

LAMP REPLACE indicator

Indicators			Projector Condition
POWER green	LAMP red	LAMP REPLACE yellow	
☼	●	☼	The lamp cannot light up. (The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed.)
○	●	☼	The lamp cannot light up. (The lamp has been cooled down enough and the projector is in stand-by mode and ready to be turned on with the ON/STAND-BY button.)
--	--	○	The lamp has been used overtime. Replace the lamp immediately and then reset the lamp counter. The indicator will be turned off after resetting the counter.

* When the projection lamp reaches its end of life, the LAMP REPLACE indicator lights yellow. When this indicator lights yellow, replace the projection lamp with a new one promptly. Reset the lamp counter after replacing the lamp.

Power failure detection system

Detection of Power failure

Projector provides a protection circuit to prevent the secondary failure when the power failure, fans failure or temperature failure occurs on the projector. The power failure detection lines "P-FAIL_S5V", "P-FAIL_15V", etc. are connected to the main power supplies and fans. When the failure occurs, IC301<SYSTEM CONTROL> receives an error information through the power failure detection lines and turns off the signal "LAMP_DC_ON" output from pin 145 of IC301 to stop the power supply.
The power failure detection signals are sent to IC1801<I/O EXPANDER> and then sent to IC301<SYSTEM CONTROL> .

Diagnosis Information of Power Failure

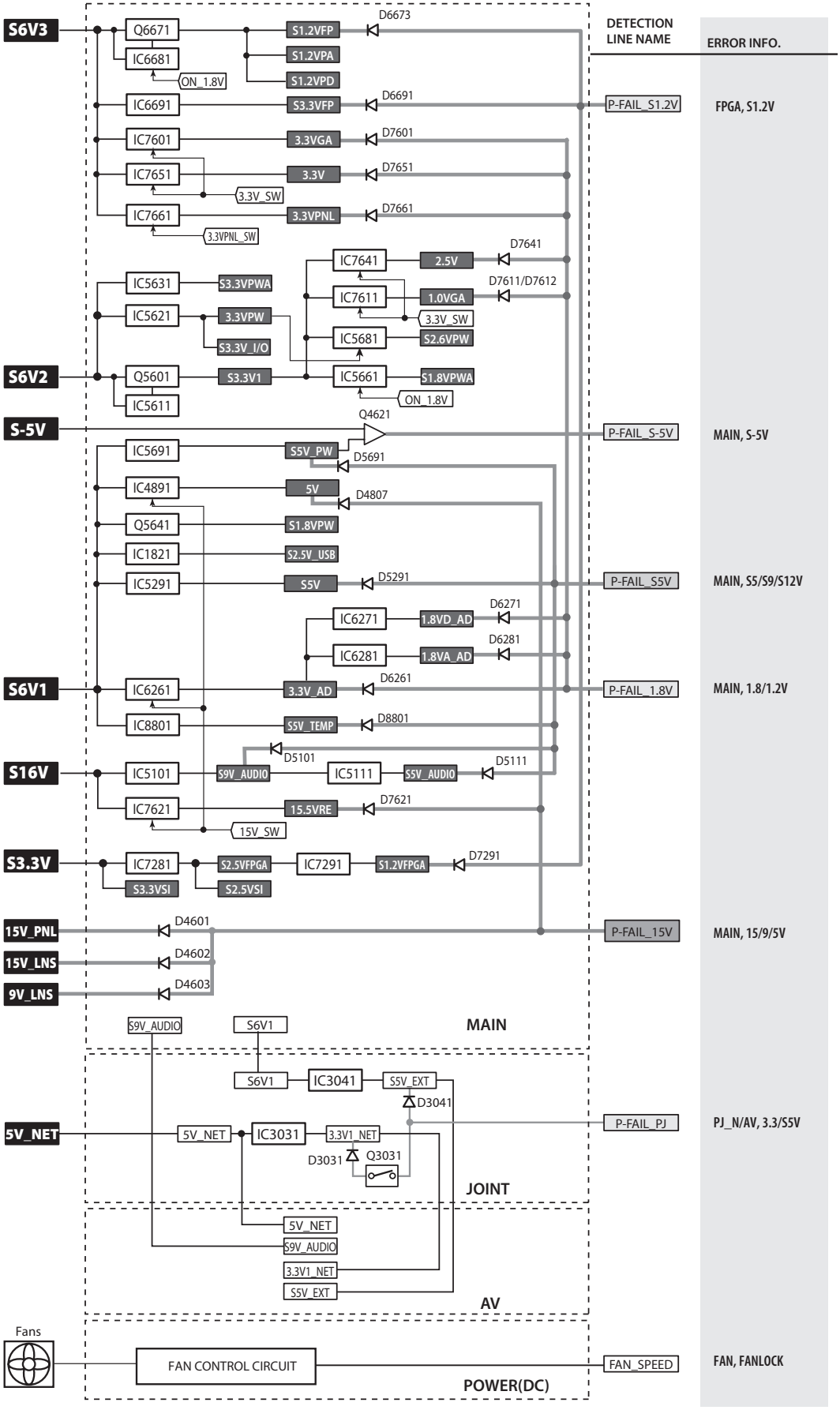
IC1801

Detecting Signal	Failure Circuit/Parts
P-FAIL_1.8V	3.3V, 2.5V,1.8V and peripheral circuit on the Main Board
P-FAIL_S5V	S5V, S9V, S12 and peripheral circuit on the Main Board
P-FAIL_15V	15V, 9V, 5V and peripheral circuit on the Main Board
P-FAIL_S1.2V	S3.3V, S1.2V and peripheral circuit on the Main Board
P-FAIL_S-5V	S-5V and peripheral circuit on the Main Board
P-FAIL_PJ	PJ-Network Board and peripheral circuit on the Main Board
FAN_SPEED	Failure of Fan, FN901, FN902, FN903, FN904, FN905 connected to the Power(DC) Board

Error information table

IC	Pin	Signal Name	Connection Lines	Error Information	Failue Area
IC1801	61	P-FAIL_1.8V	3.3V_AD, 3.3VA_AD, 3.3VD_AD, 1.8VA_AD, 1.8VD_AD, 3.3VGA, 3.3VPNL, 3.3V, 2.5V, 1.0VGA,	MAIN, 1.8/1.2V	S6V3, S6V2 S6V1 line on Main
	62	P-FAIL_S-5V	S-5V	MAIN, S-5V	S-5V line on Main, AV
	63	P-FAIL_S1.2V	S3.3VFP, S1.2VFPGA, S1.2VFP, S1.2VPA, S1.2VPD,	FPGA, S1.2V	S3.3V, S6V3 line on Main
	64	P-FAIL_15V	15V_PNL, 15V_LNS, 9V_LNS, 15.5VRE, 5V	MAIN, 15/9/5V	15V_PNL. 15V_LNS, 9V_LNS, 15.5V, 5V line on Main
	65	P-FAIL_S5V	5VPW, S5V, S5V_TEMP, S9V_AUDIO, S5V_AUDIO	MAIN, S5/S9/S12	S5V_TEMP, S5V_AUDIO, S5V, S9V_AUDIO, S5VPW line on Main
	66	P-FAIL_PJ	PJ-Network Board, AV 3.3V1, S5V_EXT	PJ_N/AV, 3.3/S5V	PJ-Network Board, 3.3V, S5V line on AV, Joint
IC7201	103 I 108	FAN_SPEED5 (FAN_MTR5) I FAN_SPEED1 (FAN_MTR1)	FAN CONTROL	FAN1, FANLOCK FAN2, FANLOCK FAN3, FANLOCK FAN4, FANLOCK FAN5, FANLOCK	Fan Control on Power(DC) FAN1 (FN901) FAN2 (FN902) FAN3 (FN903) FAN4 (FN904) FAN5 (FN905)

Power failure detection tree



Error History Log

This projector provides the error history log function. To check the logs, you need to enter the service mode and select Group No. "220" and Item No. "0" to "49". The error code is displayed on the Data column. The description of the error code is listed on the table below.

* How to enter the service mode and select the group, item and data value, see "Service Adjustment Menu Operation".

Group No.	Item No.	Data (Error Code) (See table below)	
220	0	✻	<- Latest Error
	1	✻	
	2	✻	
	3	✻	
	.	✻	
	.	✻	
	.	✻	
	48	✻	
	49	✻	

Error	Error Code	Error Infomation (See Powe Failure Detection Tree)
Normal	0	-
Power Failure	1000	MAIN, 1,8/1.2V
	1001	MAIN, S-5V
	1002	FPGA, S1.2
	1003	MAIN, 15/9/5V
	1004	MAIN, S5/S9/S12V
	1005	PJ_N/AV, 3.3/S5V
	1006	FAN1, FANLOCK
	1007	FAN2, FANLOCK
	1008	FAN3, FANLOCK
	1009	FAN4, FANLOCK
	1010	FAN5, FANLOCK
	1011	FPGASW, CONFIG
	1012	FPGAFINE, CONFIG
Temperature Error	2000	Sensor A detects abnormal temperature. (TH901)
	2001	Sensor A fails measurement. (TH901)
	2100	Sensor B detects abnormal temperature. (IC8841)
	2101	Sensor B fails measurement. (IC8841)
	2102	Sensors B-A abnormal temperature.
	2200	Sensor C detects abnormal temperature. (TH902)
	2201	Sensor C fails measurement. (TH902)
	2202	Sensors C-A abnormal temperature.
Lamp Error	3000	Lamp1 fails on
	3001	Lamp1 goes out
	3002	Communication Error on Lamp1
Filter Error	4000	Air Filter Clogged

How to clear the Error Log

1. Enter the Service Mode, and select Group No. "220" and Item No. "50".
2 The history log will be cleared when the Data Value is set to "10". The value automatically returns to "0".

* How to enter the service mode and select the group, item and data value, see "Service Adjustment Menu Operation".

Diagnosis of Power Failure with RS-232C port

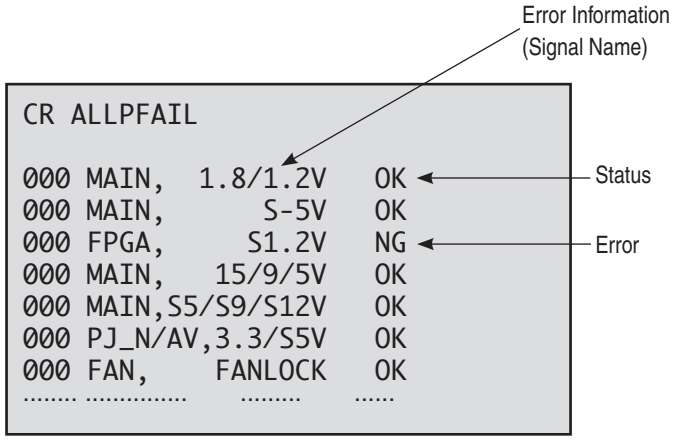
This projector provides a function to get the error information of the projector by using the RS-232C serial port for the power failure diagnosis.
The further error information of the power failure and fan failure can be found out by using this function.

Diagnosis procedure

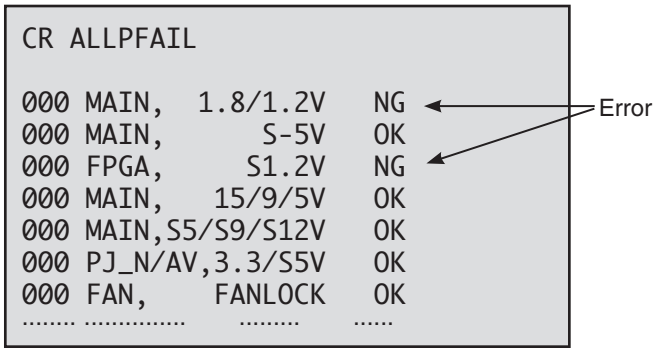
1 Connect a RS-232C serial cross cable to SERIAL PORT IN on the projector and serial port on the PC.
2 Launch a communication software "Hyper terminal" provided with PC and setup the communication condition as follows;

Baud rate	: 19200 bps
Parity check	: none
Stop bit	: 1
Flow control	: none
Data bit	: 8

3 Turn on the projector. Check that the LED shows a power failure. (All the LEDs except LAMP LED are blinking)
4 Type a diagnosis command of the power failure “CR ALLPFAIL” and press a "ENTER" key within 1 second on the command window of the software.
The error information will be listed on the window as the right.
Check the status column. If “NG” is listed, the power failure occurs on its signal line(Power Line Name). In case of the right table, this error information means that the power failure occurs on the S1.2V power supply on the FPGA circuit on the main board. Check if the parts connected to S6V3, S3.3V power supply line are defective.



Also the error information may be listed multiple as the below;
In the above case, 2 kinds of causes are considered. One is the power failure occurs on the multiple places at the same time, other is a power failure affects multiple power supply lines even if the failure occurs on the single place.
In the first case, Check if the parts connected to the multiple power supply lines are defective. In the later case, determine a failure point referring to the power supply flow chart on previous page. Basically, if the power failure occurs on the upper side of power supply, the power failure is also detected on lower side of power supply frequently. If the failure occurs on the lower side of power supply, it is lightly affected to the upper side of the power supply. In the above case, because the failure occurs on the S6V3 power supply on the MAIN circuit on the main board, the failure is also detected on the 1.8/1.2V power supply and S1.2V power supply on the main board.



* See "Power Failure Detection Tree" for further description of the Error Information.

Control Port Functions

System Control I/O Port Functions (PW392, IC301)

PIN	PORT	NAME	DESCRIPTION	I/O
347	D26	5V_SW_EX	5.0V Power On/Off Control [H: On, L: Off]	O
348	D27	3.3V_SW_EX	3.3V Power On/Off control [H: On, L: Off]	O
251	D28	15V_SW_EX	15V Power On/Off Control [H: On, L: Off]	O
146	D29	FAN_SW_1EX	Fan Control SW1 [H: On, L: Off]	O
33	D30	FAN_SW_2EX	Fan Control SW2 [H: On, L: Off]	O
250	C28	1.8_SW_EX	1.8V Power On/Off Control [H: On, L: Off]	O
145	C29	LAMP_DC_ON_EX	Ballast Power Control SW [H: On, L: Off]	O
32	C30	BALAST_AC_EX	Lamp Control SW [H: On, L: Off]	O
253	F28	XSTDBYEN	TE7783 Standby Mode H: Fixed	O
148	F29	NCONFIG		O
35	F30	NSTATUS		I
438	E26	FILTER_LED	FILTER_LED [H: On, L: Off]	O
349	E27	POWER_LED	POWER_LED [H: On, L: Off]	O
252	E28	READY_LED	READY_LED [H: On, L: Off]	O
147	E29	TEMP_LED	WARNING_TEMP_LED [H: On, L: Off]	O
34	E30	LAMP_LED	LAMP_REPLACE_LED [H: On, L: Off]	O
37	H30	FPGA_K1		O
440	G26	PW_SCS	3Wire Select	O
351	G27	PW_SDATA_OUT	3Wire Data	O
254	G28	GAMMA_RESET	Digital Gamma IC Reset [H: Reset]	O
149	G29	SERIAL_EN		O
36	G30	CONF_DONE	FPGA Configuratrion End [H: End]	I
439	F26	MUTE	MUTE [H: Mute On, L: Off]	O
350	F27	XRST	TE7783 (I/O EXP.) Reset	O
339	D18	WATCHDOG_EN	IC861 Output Enable	O
19	A19			
134	B19	SIPD	Sil169 Power Down [L: Power Down]	O
241	C19	IN0_HDET	BA7078AFP H-Sync Detect [H: H-Sync Exist, L: No]	I
340	D19	IN1_VDET	BA7078AFP V-Sync Detect [H:V-Sync Exist, L: No]	I
30	A20	PW_SDA3	IIC Bus SDA3	I/O
135	B20	PW_SCL3	IIC Bus SCL3	I/O
306	AB3	LENS_UD_SW	Lens Up/Down Switch	I/O
144	B29	IN1R[2]	Red Pixel Input	
29	A29	IN1R[3]	Red Pixel Input	
143	B28	IN1R[4]	Red Pixel Input	
249	C27	IN1R[5]	Red Pixel Input	
28	A28	IN1R[6]	Red Pixel Input	
142	B27	IN1R[7]	Red Pixel Input	
27	A27	IN1R[8]	Red Pixel Input	
248	C26	IN1R[9]	Red Pixel Input	
437	E25	IN1G[2]	Green Pixel Input	
346	D25	IN1G[3]	Green Pixel Input	
247	C25	IN1G[4]	Green Pixel Input	
140	B25	IN1G[5]	Green Pixel Input	
25	A25	IN1G[6]	Green Pixel Input	
345	D24	IN1G[7]	Green Pixel Input	
246	C24	IN1G[8]	Green Pixel Input	
139	B24	IN1G[9]	Green Pixel Input	
245	C23	IN1B[2]	Blue Pixel Input	
138	B23	IN1B[3]	Blue Pixel Input	
23	A23	IN1B[4]	Blue Pixel Input	
343	D22	IN1B[5]	Blue Pixel Input	
244	C22	IN1B[6]	Blue Pixel Input	
137	B22	IN1B[7]	Blue Pixel Input	
22	A22	IN1B[8]	Blue Pixel Input	
342	D21	IN1B[9]	Blue Pixel Input	
386	AG12	RXD_PW	UART RXD	I
291	AH12	TXD_PW	UART TXD	O
355	L27	PW_SCL0	IIC Bus SCL0	I/O
444	L26	PW_SDA0	IIC Bus SDA0	I/O
153	L29	PW_SCL1	IIC Bus SCL1	I/O
258	L28	PW_SDA1	IIC Bus SDA1	I/O
41	M30	PW_SCL2	IIC Bus SCL2	I/O
154	M29	PW_SDA2	IIC Bus SDA2	I/O
293	AH10	PW_R/C_REAR	Remote Control Input (Rear)	I
40	L30	Zoom+	Zoom+ [H: Active, L: Stop]	O
443	K26	Focus-	Focus- [H: Active, L: Stop]	O
354	K27	PW_PWM2	FPGA Clock	O

Control Port Functions

PIN	PORT	NAME	DESCRIPTION	I/O
257	K28	-	Not used	-
152	K29	Focus+	Focus+ [H: Active, L: Stop]	O
39	K30	Zoom-	Zoom- [H: Active, L: Stop]	O
445	M26	CHO_RXD	CHO_RXD	I
356	M27	CHO_TXD	CHO_TXD	O
67	AK22	ADC0	Not used	AI
178	AJ22	KEY1	Key Input1	AI
281	AH22	KEY2	Key Input2	AI
68	AK21	KEY3	Key Input3	AI
179	AJ21	OPTION1	Option SW (Not used)	AI
282	AH21	OPTION2	Option SW (Not used)	AI
69	AK20			AI
180	AJ20	OPTION3	Option SW (Brand)	AI
65	AK24	FAN_DAC1_PW	Analog Output for Fan Control1	AO
176	AJ24	FAN_DAC2_PW	Analog Output for Fan Control2	AO
66	AK23	FAN_DAC3_PW	Analog Output for Fan Control3	AO
177	AJ23	PW_DAC	Not used	AO

Parallel I/O Expander Port Functions (TE7783, IC1801)

PIN	PORT	NAME	DESCRIPTION	I/O
1	DVss	DVss	-	-
2	P1	DDC_SW1	DVI/HDC DDC Switch 1 Normal: L, Connect: H	O
3	P2	DDC_SW2	Analog DDC Switch 2 Normal: L, Connect: H	O
4	P3	PC1/PC2_SW	PC1 Analog / PC2 AnalogSwitch H: PC1, L: PC2	O
5	P4	SIRST	Sil169 Reset H-L-H	O
6	P5	DVI_HPD	DVI Hot Plug Detection	O
7	P6	HDCP_IIC_SW	HDCP Authentication IIC Bus Switch, L: HDCP H: Others	O
8	P7	PJ_UPDATE	PJ-Net Forced Write Mode, Normal: H	O
9	P8	NET_H/L	PJNet Command Request	O
10	DVdd25	DVdd25	-	-
11	DVss	DVss	-	-
12	DVdd33	DVdd33	-	-
13	A6	A6	Address 6	I
14	A5	A5	Address 5	I
15	A4	A4	Address 4	I
16	A3	A3	Address 3	I
17	A2	A2	Address 2	I
18	A1	A1	Address 1	I
19	A0	A0	Address 0	I
20	XCS	XCS0	Chip Select	I
21	XRD	XRD	Read Enable	I
22	XWR	XWR	Write Enable	I
23	RSTPOL	RSTPOL	Polarity Select for Reset	I
24	DVss	DVss	-	-
25	DVdd33	DVdd33	-	-
26	D7	D7	Data Bus 7	I/O
27	D6	D6	Data Bus 6	I/O
28	D5	D5	Data Bus 5	I/O
29	D4	D4	Data Bus 4	I/O
30	D3	D3	Data Bus 3	I/O
31	D2	D2	Data Bus 2	I/O
32	D1	D1	Data Bus 1	I/O
33	D0	D0	Data Bus 0	I/O
34	WAKEUP	WAKEUP	Wakeup	O
35	DVss	DVss	-	-
36	RST	RST	Reset Input, Active:H	I
37	DVdd33	DVdd33	-	-
38	XI	XI	XTAL IN	I
39	XO	XO	XTAL OUT	O
40	DVss	DVss	-	-
41	DVdd33	DVdd33	-	-
42	XCS1	XCS1	Ext. Chip Select	O
43	XSTDBYEN	XSTDBYEN	Standby Mode On/Off	I
44	DVdd25	DVdd25	-	-
45	XINVALID	XINVALID	Serial Port Enable	I
46	DVss	DVss	-	-
47	XINT	XINT	Level Output	O
48	P21	SIPDO	DVI Output Power Down Mode L: Power Down	O
49	P22	PROG_I/O	Configuration Start Pin L: Fixed	O
50	P23	LENS_LR_SW	LensMoving Switch	O
51	P24	STB_I/O	FPGA Chip Select (Strobe)	O
52	P25	R/C_CTL1	Rear-RC Selection Switch, L: Rear	O
53	P26	R/C_CTL0	Front-RC Selection Switch, L: Front	O
54	P27	USB_VBUS	USB VBUS	I

Control Port Functions

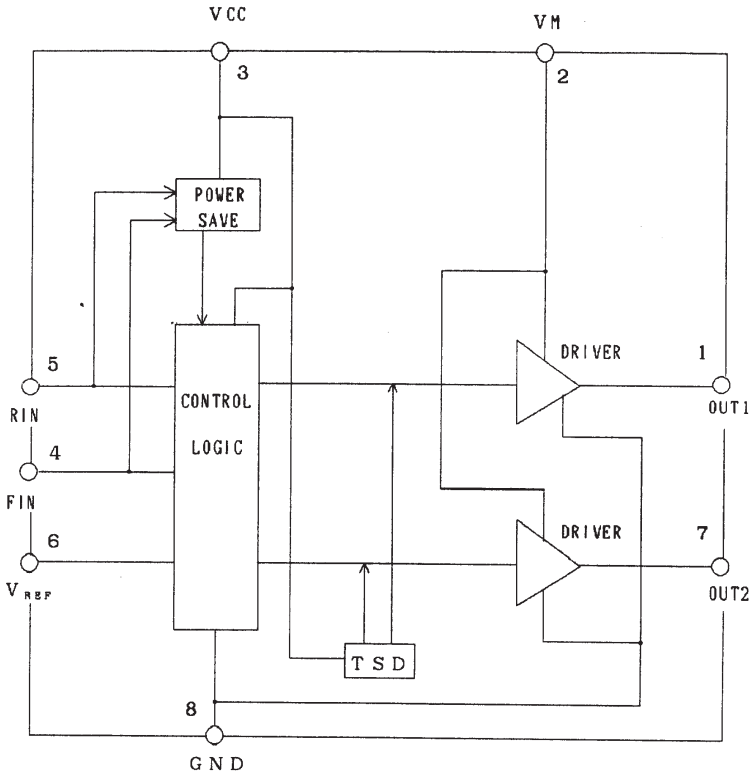
PIN	PORT	NAME	DESCRIPTION	I/O
55	P28	D+ PULL-UP	USB D+ Pull-up Control	O
56	DVss	DVss	-	-
57	VREFN	VREFN	Reference Voltage Output	
58	VCOM	VCOM	Opamp Bias Tap	
59	VREFP	VREFP	Reference Voltage Output	
60	Avss	Avss	-	-
61	AIN1	P-FAIL_1.8V	1.8V Power Failure Detection	AI
62	AIN2	P-FAIL_S-5V	S-5V Power Failure Detection	AI
63	AIN3	P-FAIL_1.2V	1.2V Power Failure Detection	AI
64	AIN4	P-FAIL_15V	15V Power Failure Detection	AI
65	AIN5	P-FAIL_S5V	S5V Power Failure Detection	AI
66	AIN6	P-FAIL_PJ	PJ-Net Power Failure Detection	AI
67	AIN7	THERM1	Temp Error Detection (Room)	AI
68	AIN8	THERM2	Temp Detection (TEMP C Blue Panel)	AI
69	AVdd33	AVdd33	-	-
70	DVdd33	DVdd33	-	-
71	XCS2	XCS2	Ext. Chip Select	O
72	P31	I/O_PJ_UART	PJ-Net Command (PW:TXD)	O
73	P32	PJ_I/O_UART	PJ-Net Command (PW:RXD)	I
74	P33	M_TXD	PJ-Net AirMouse TXD	O
75	P34	Not Used		I
76	P35	LENS_LR_PWM	Lens Shift Left/Right PWM Output, L: Move, H: Stop	O
77	P36	LENS_UD_PWM	Lens Shift Up/Dwon PWM Output, L: Move, H: Stop	O
78	P37	DAC_PWM	PWM for Fan Control	O
79	P38	NET_SW	PJ-Net Power On/Off	O
80	UVss	Uvss	-	-
81	DMINUS	DMINUS	USB D-	I/O
82	DPLUS	DPLUS	USB D+	I/O
83	UVdd33	UVdd33	-	-
84	DVdd25	DVdd25	-	-
85	XCS3	XCS3	Ext. Chip Select	O
86	DVss	DVss	-	-
87	DVss	DVss	-	-
88	RSTMSK	RSTMSK	Internal Reset Mask	I
89	DVdd33	DVdd33	-	-
90	DVss	DVss	-	-
91	P11	SCLK_I/O	Configration Clock	O
92	P12	SDATA_I/O	Configration Data / FPGA Data Out	O
93	P13	SDTO_I/O	FPGA Data In	I
94	P14	BOX_SW	PJ-Net In	I
95	DVss	DVss	-	-
96	DVss33	DVss33	-	-
97	P15	W_RC_SW	Wired RC Detectionm H: Not Inserted, L: Inserted	I
98	P16	PRODUCT_OPT		I
99	P17	INT_I/O	Configration Status	I
100	P18	DONE_I/O	Configration Process End Signal	I

Parallel Bus Input Expander Port Functions (TC74LCX541, IC1881)

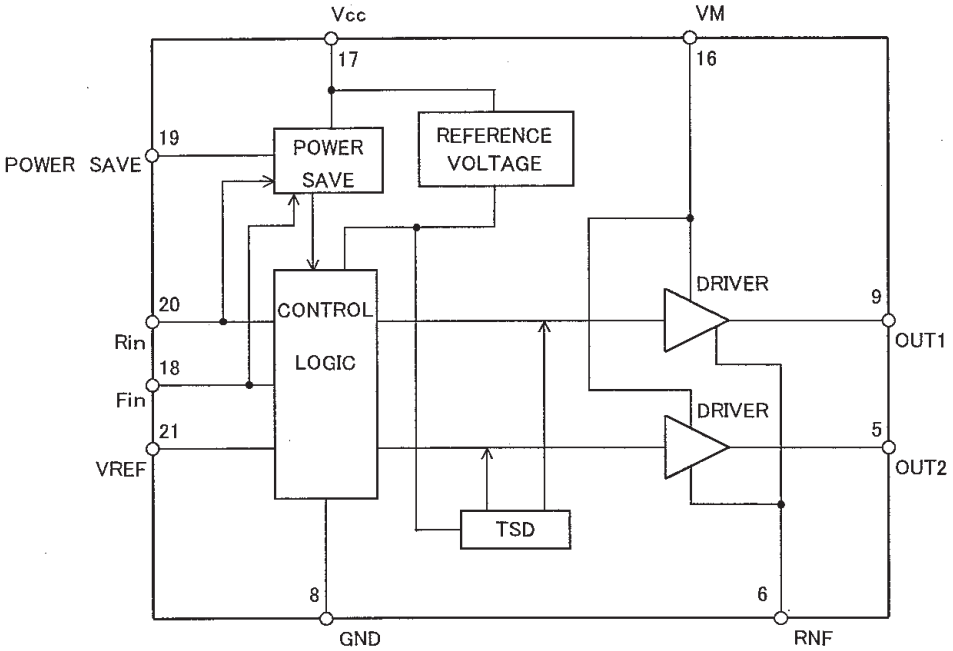
PIN	PORT	NAME	DESCRIPTION	I/O
1	OE1	CS1	PW392 Chip Select	I
2	A1	THERM2_DETECT	Temp. Sensor 2 Detection, H: Error, L: Normal	I
3	A2	LENS_SENS_C	Lens Shift Sensor (Left-Right Center), H: Center, L: Not Center	I
4	A3	LENS_SENS_L	Lens Shift Sensor (Left), L: End	I
5	A4	LENS_SENS_R	Lens Shift Sensor (Right), L: End	I
6	A5	LENS_SENS_D	Lens Shift Sensor (Down), L: End	I
7	A6	LENS_SENS_U	Lens Shift Sensor (Up), L: End	I
8	A7	THERM1_DETECT	Temp. Sensor 1 Detection, H: Error, L: Normal	I
9	A8	S_SW	S-Terminal Detection, L: Inserted	I
10	GND	GND	-	-
11	Y8	D7	Data Bus 7	O
12	Y7	D6	Data Bus 6	O
13	Y6	D5	Data Bus 5	O
14	Y5	D4	Data Bus 4	O
15	Y4	D3	Data Bus 3	O
16	Y3	D2	Data Bus 2	O
17	Y2	D1	Data Bus 1	O
18	Y1	D0	Data Bus 0	O
19	OE2	OE2	Output Enable2	I
20	Vcc	Vcc	-	-

IC Block Diagrams

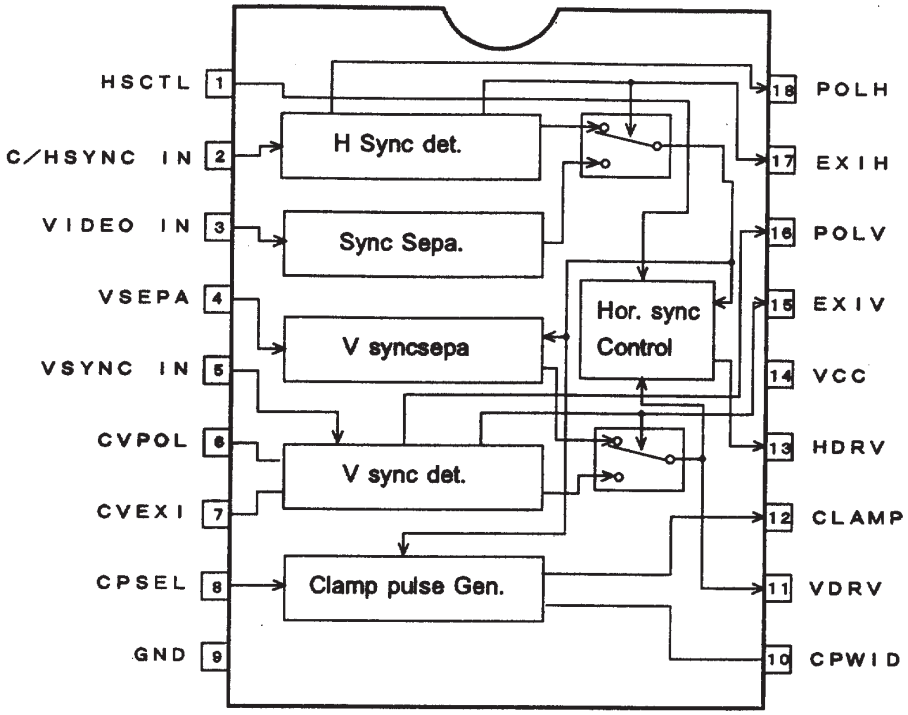
● BA6287 <Motor Drive Focus,Zoom, IC5501,IC5551>



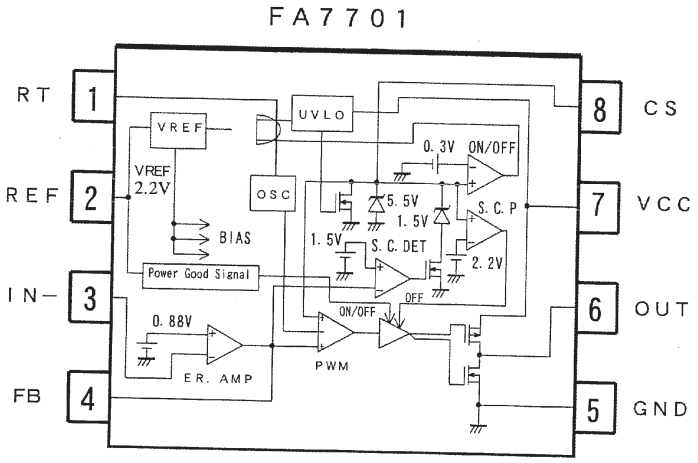
● BA6920<Motor Drive Lens Shift Up/Down,Left/Right, IC6531,IC6561>



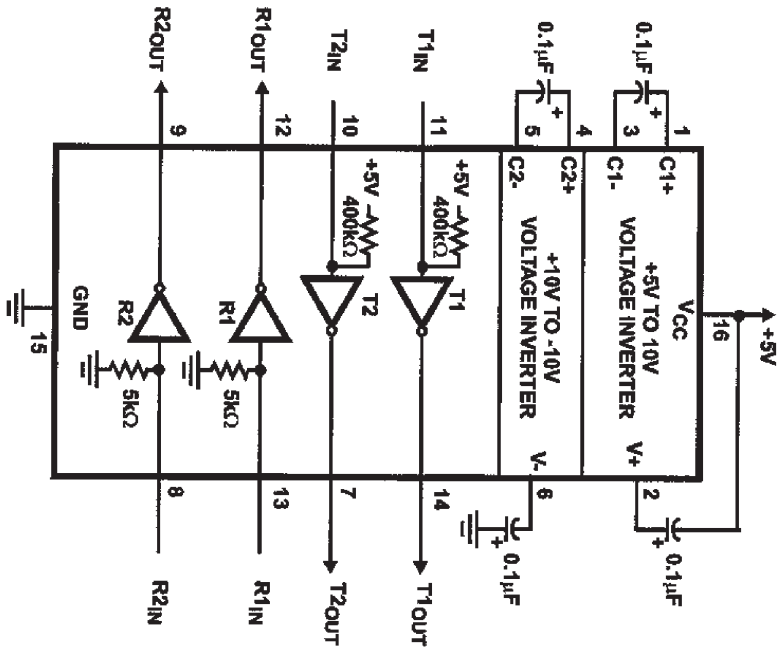
● BA7078 <Sync Seperator, IC5321>



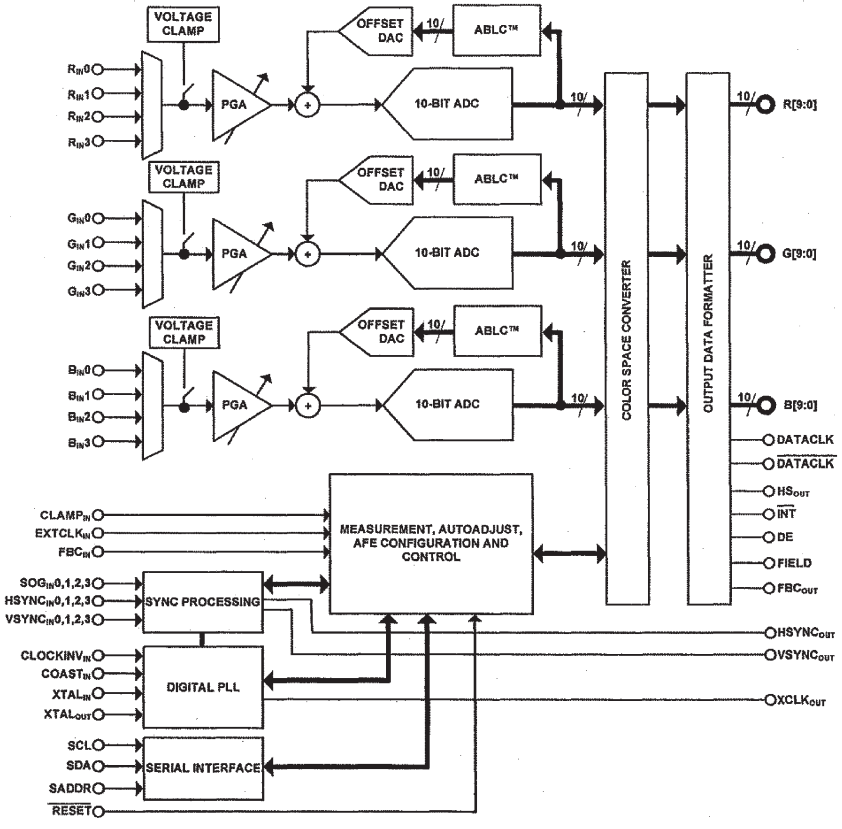
● FA7701V <Switching Controller, IC5641>



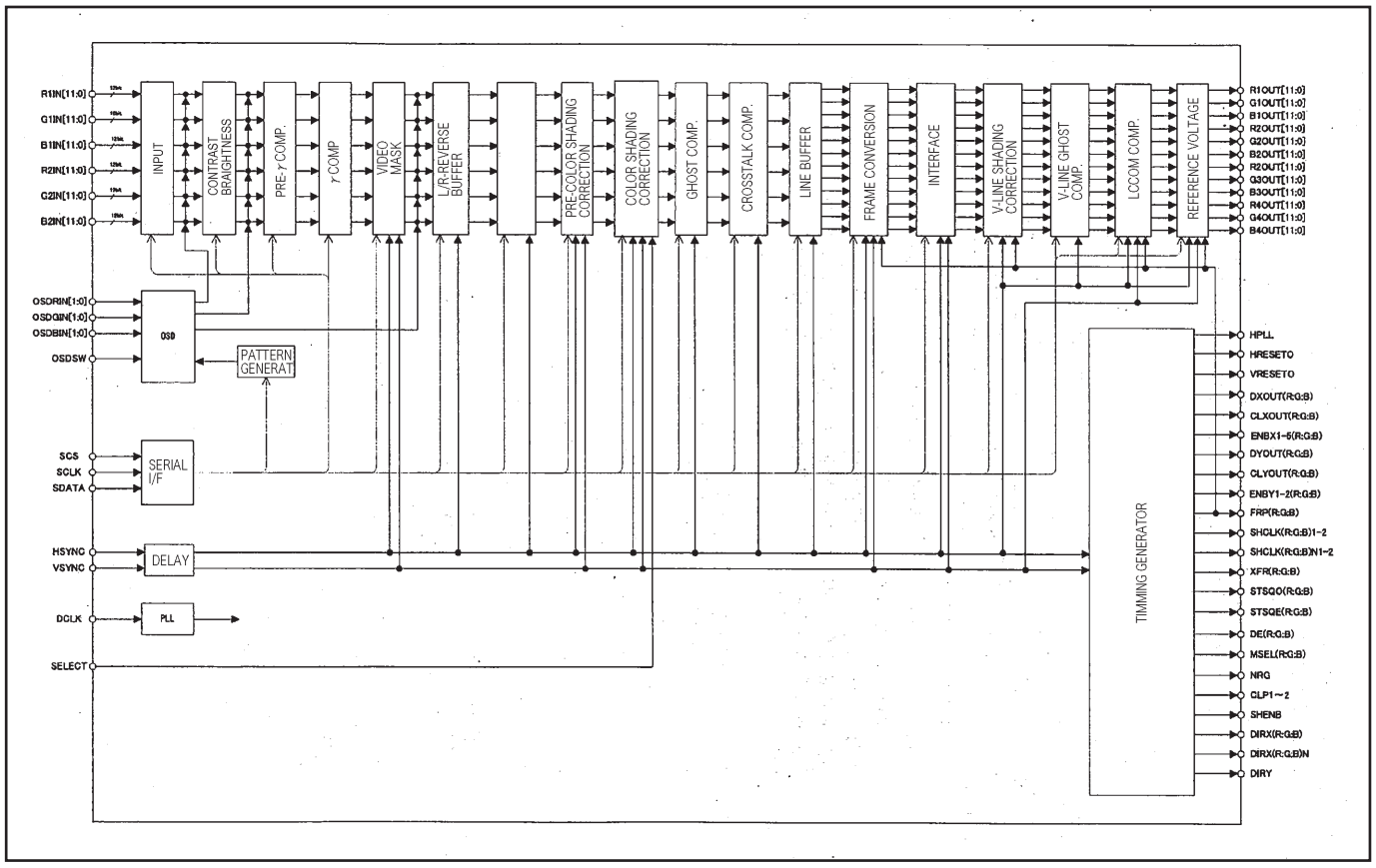
● HIN202EIB <RS-232C Driver, IC3801>



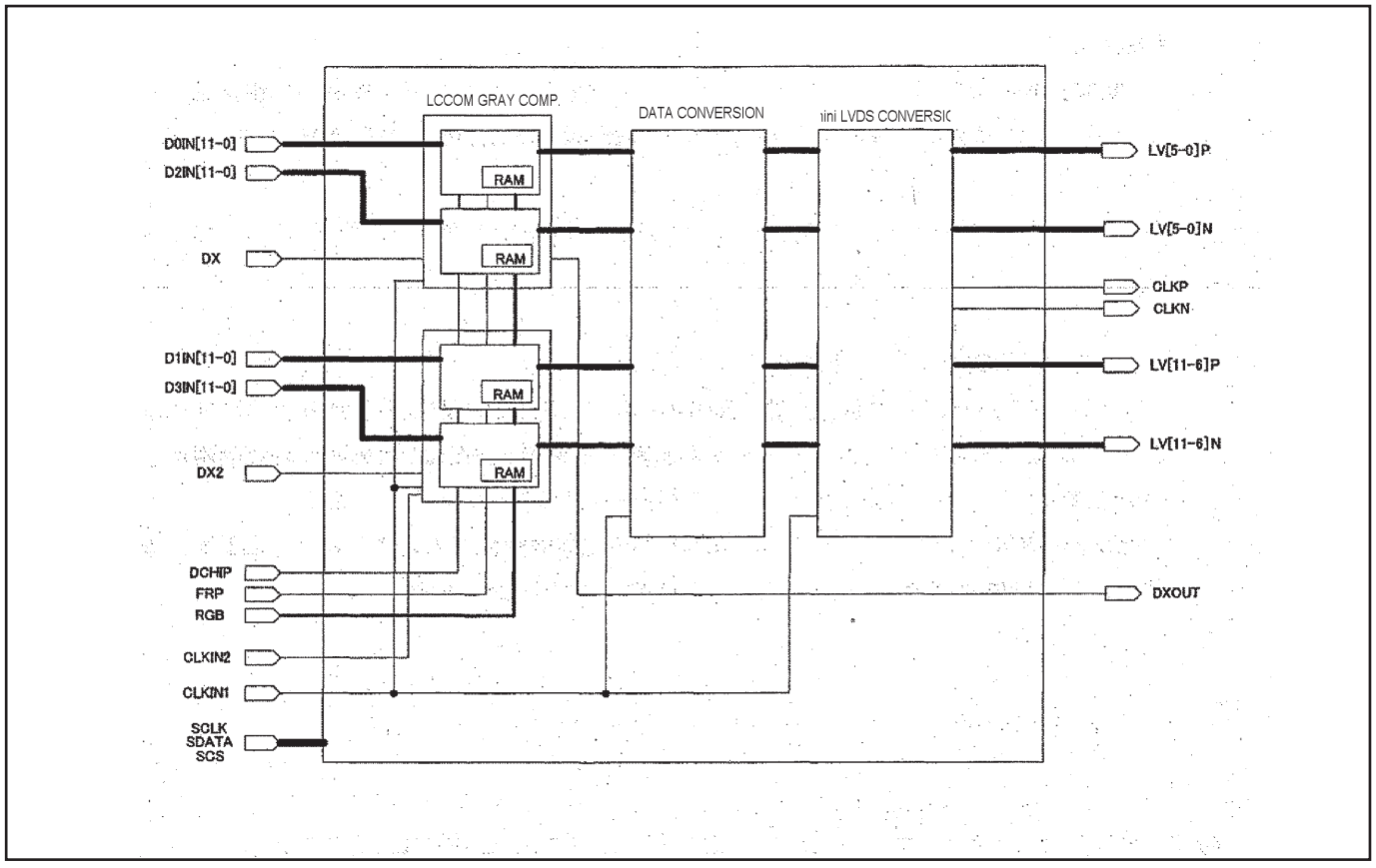
● ISL51002 <10 bit-Video A/D, IC6201>



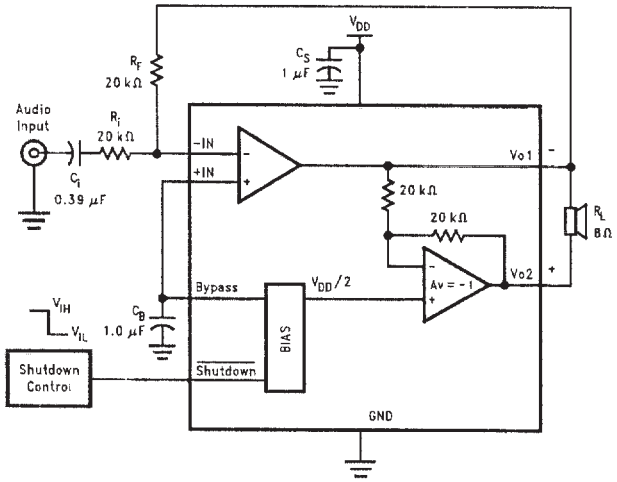
● L3E07120 <Digital Gamma Shift & LCD Driver, IC401>



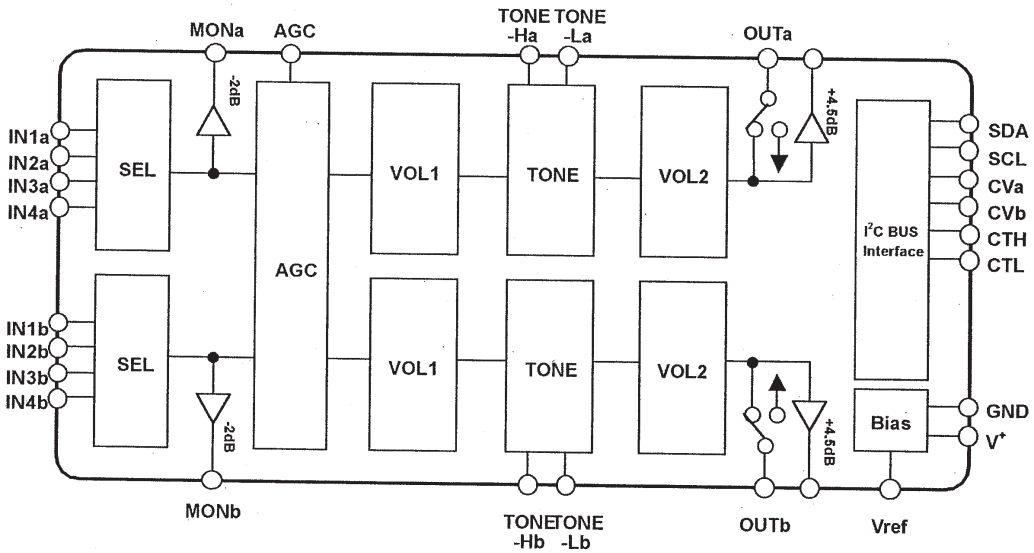
● L3E07200 <LVDS Interface, IC501,IC531,IC561>



● LM4889 <Audio Output, IC5121>



● NJW1141 <Audio Control, IC5001>



● PW392 <Scan Converter & System Control, IC301>

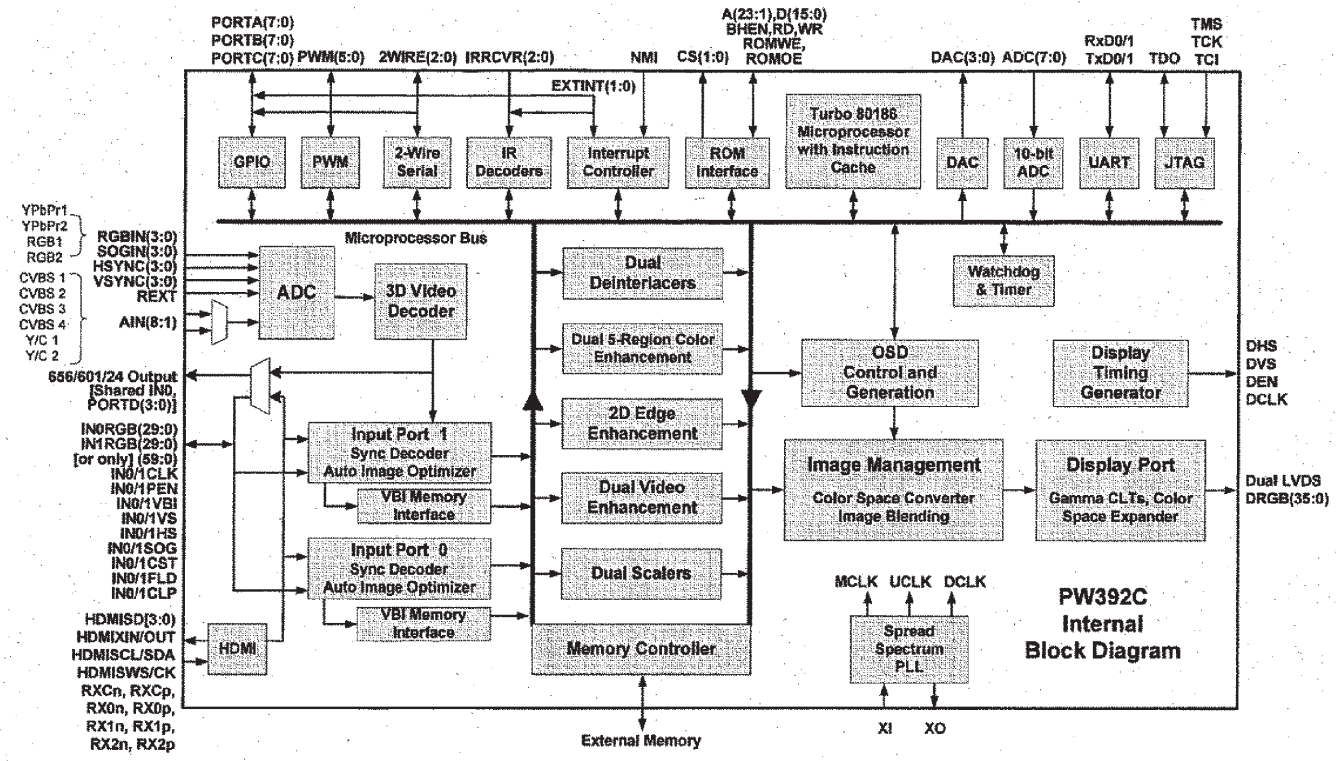
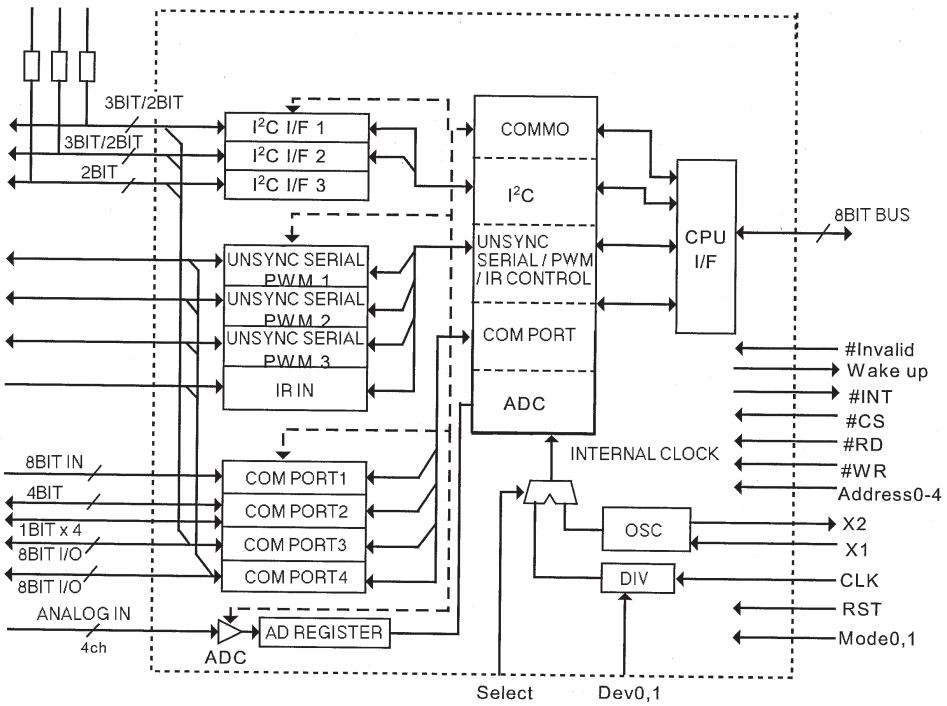
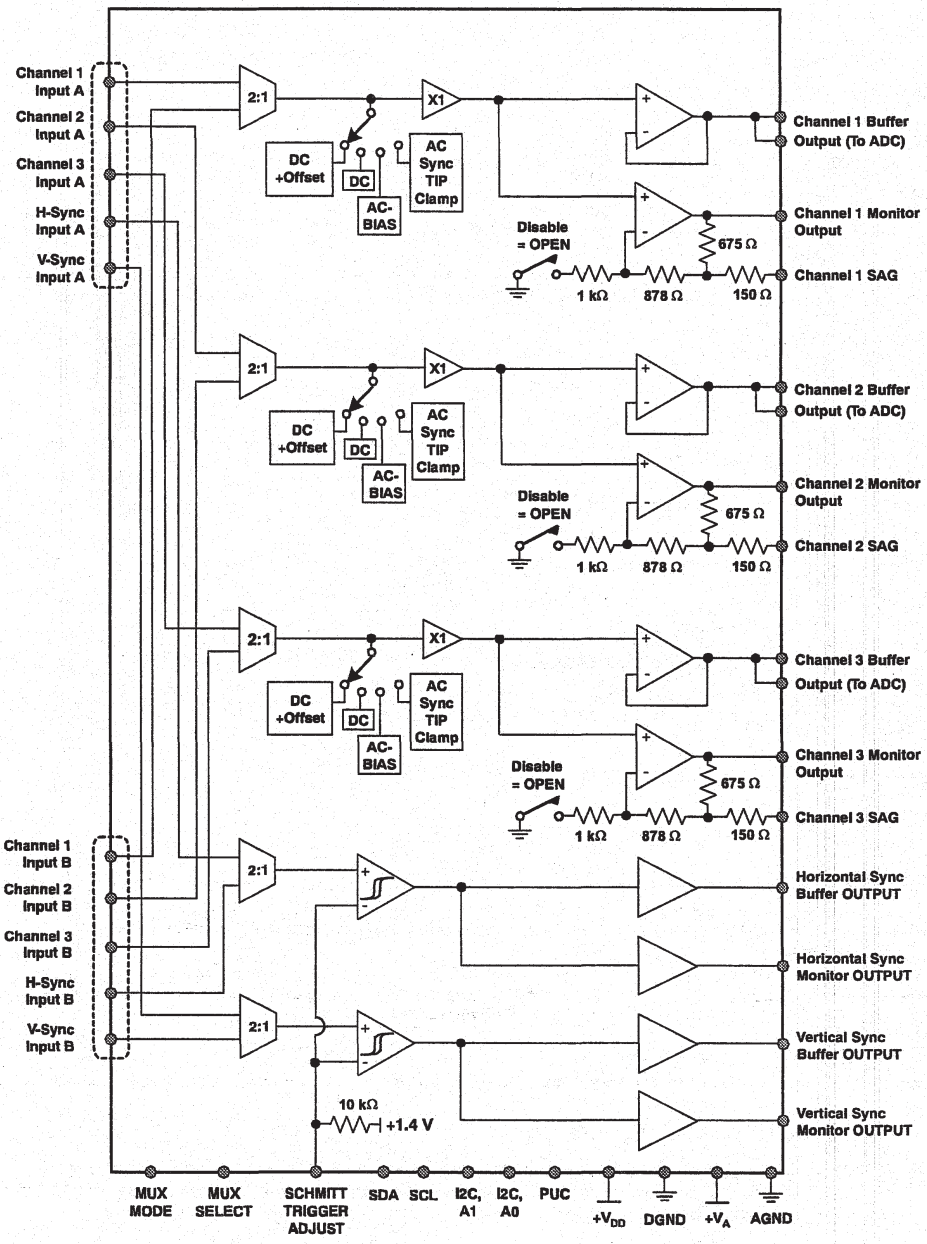


Figure 1-2 Top-Level Internal Block Diagram

● TE7783 <Parallel I/O Expander, IC1801>



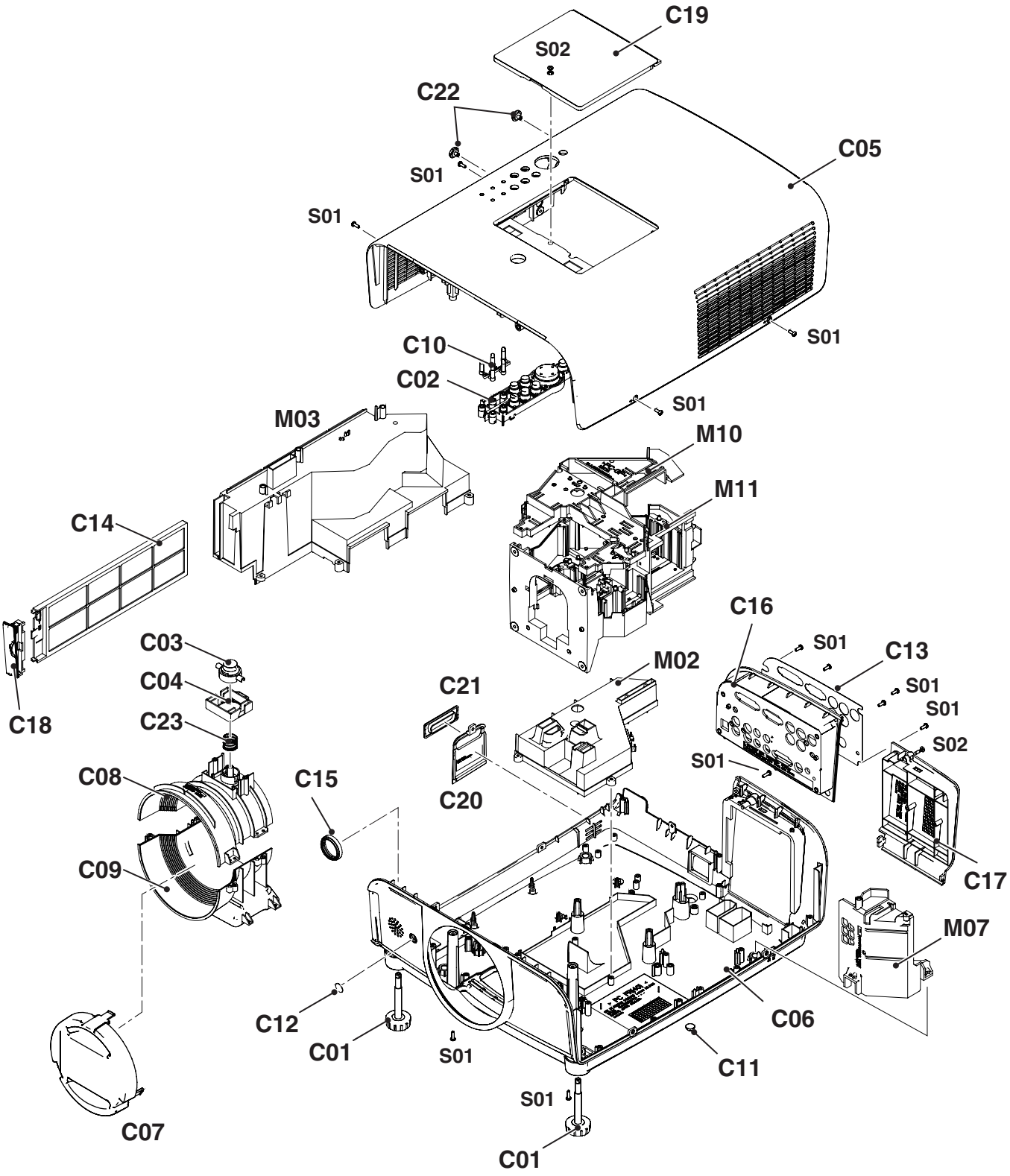
● THS7347IPHPR <PC1/PC2-SW, IC5201>



NOTE: The I^2C address of the THS7347 is 01011(A1)(A0)(R/$\overline{W}$).

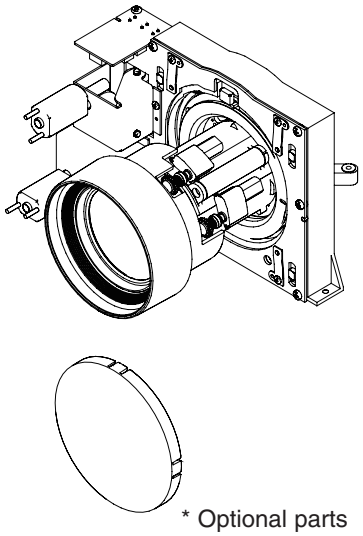
Parts Location Diagrams

Mechanical Parts Location

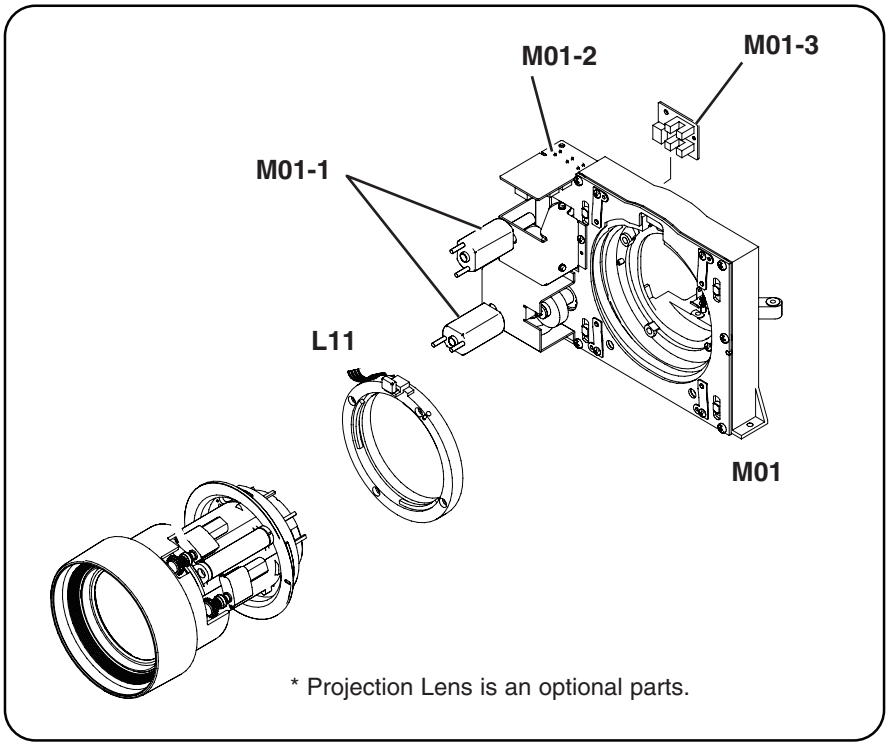


Parts Location Diagrams

Optical engine_Lens shift assembly

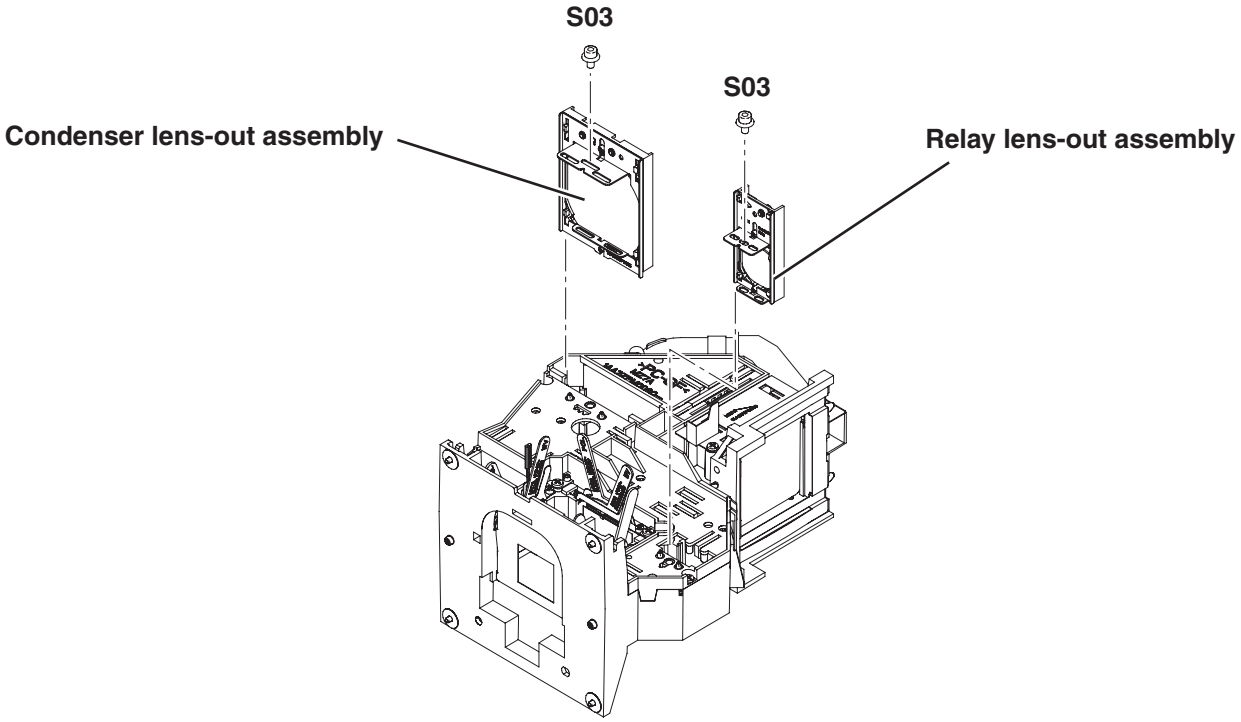


* Optional parts



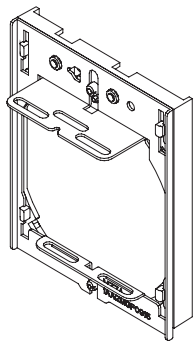
* Projection Lens is an optional parts.

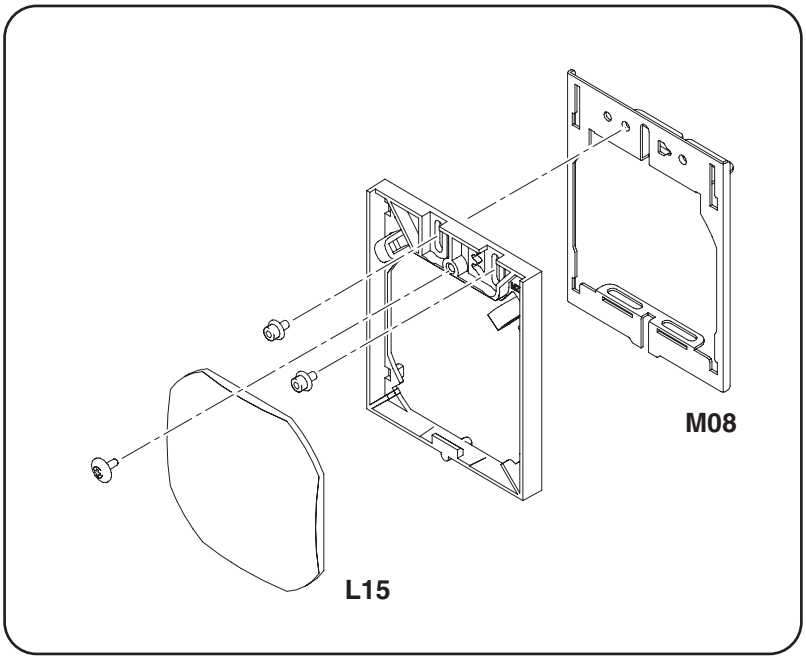
Optical engine_Lens assembly



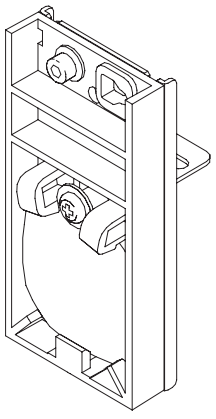
Parts Location Diagrams

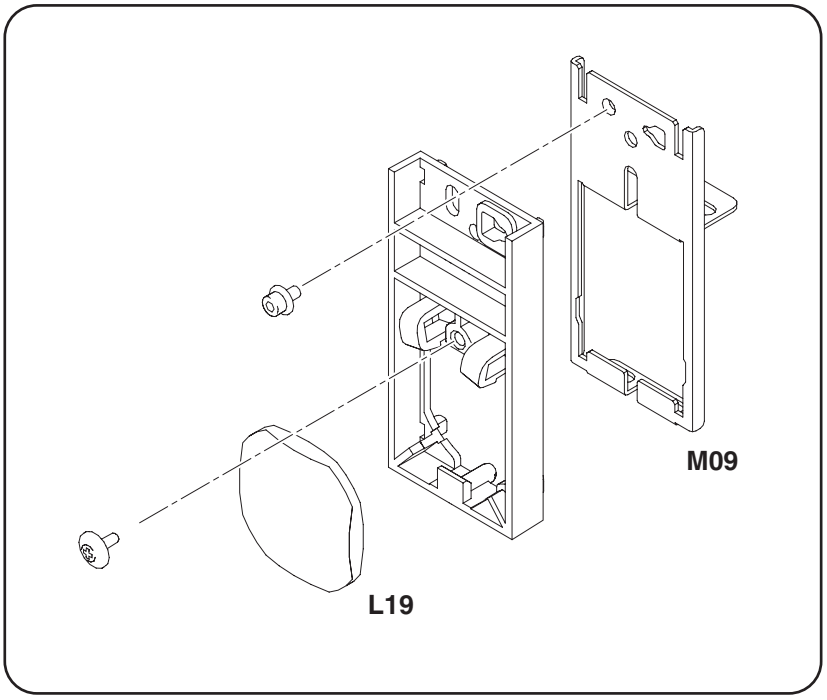
Condenser lens-out assembly





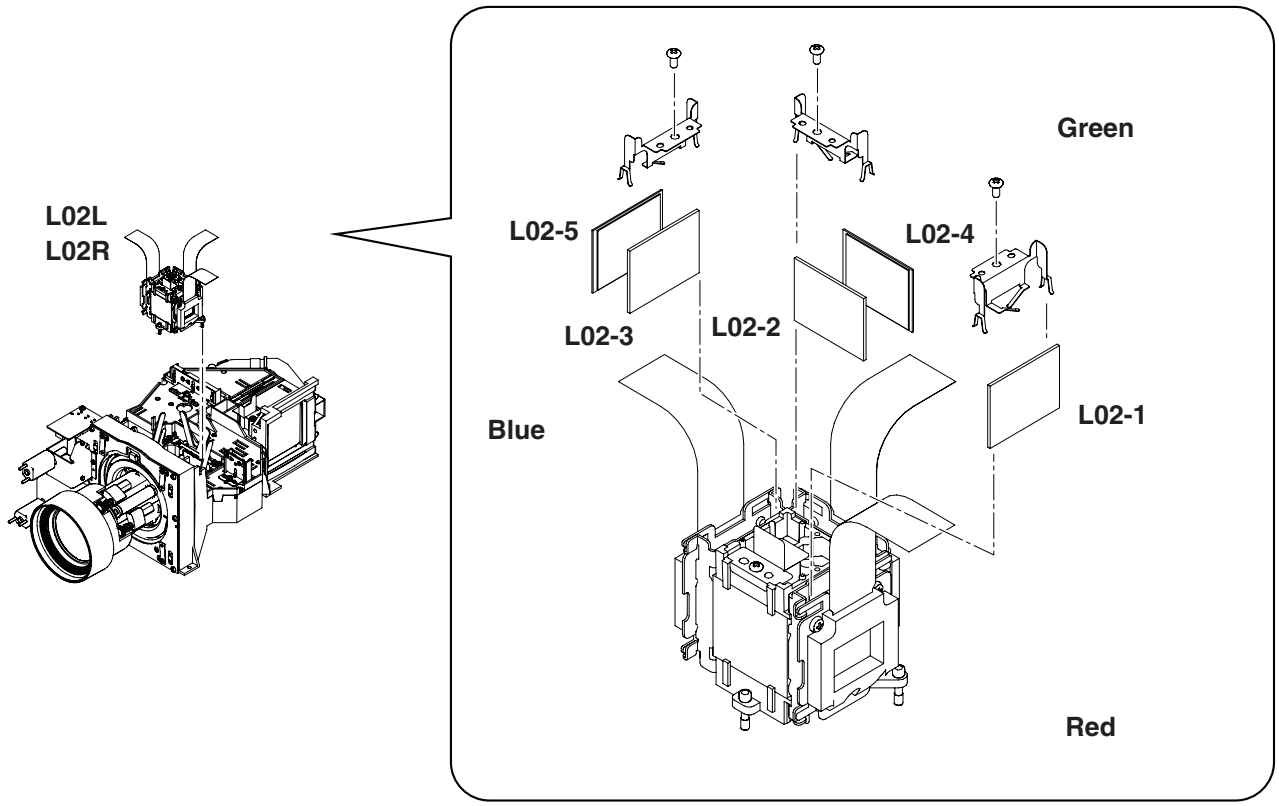
Relay lens-out assembly



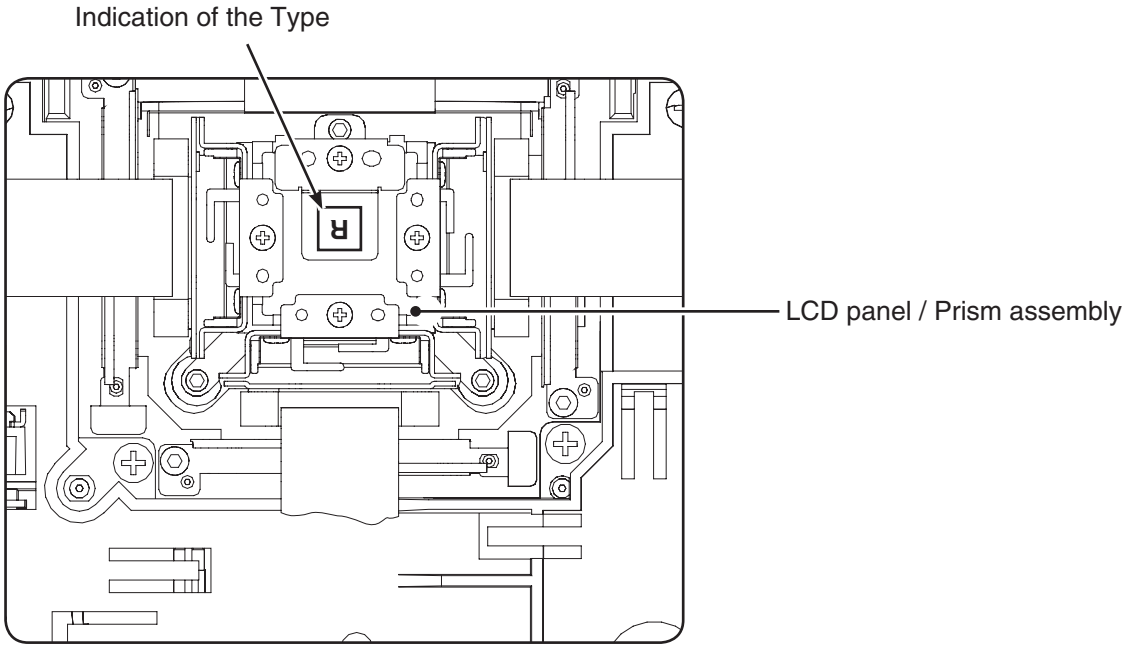


Parts Location Diagrams

LCD panel / Prism assembly

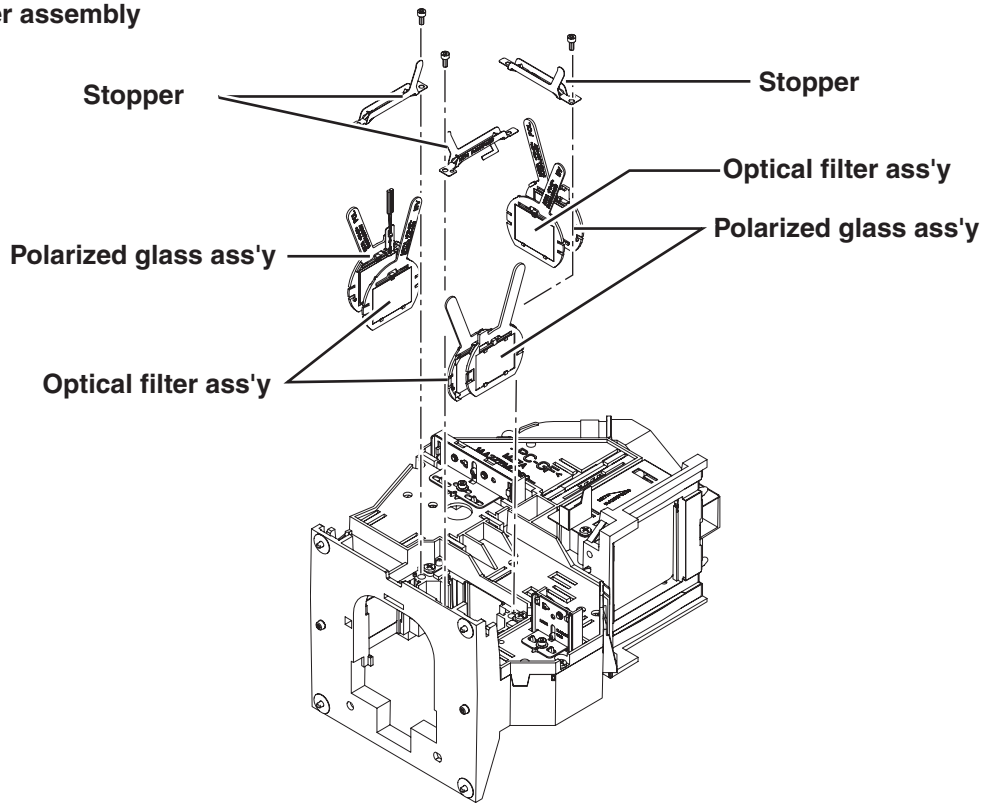


Note:
There are 2 types of LCD panel/prism assembly, named Type-R and Type-L. When replacing the LCD panel/prism assembly, replace them with the same type. The type indication label is attached on top of the LCD panel/prism assembly as shown in the below.

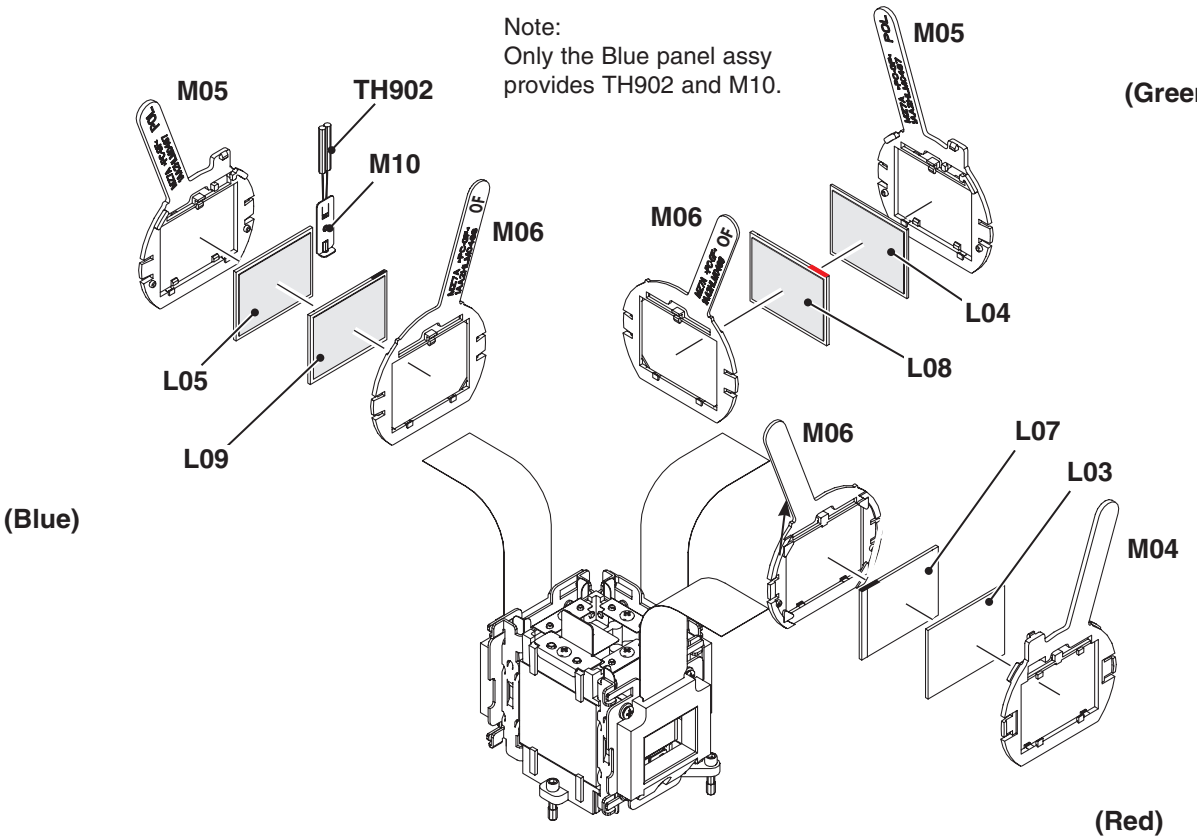


Parts Location Diagrams

Polarized Glass-In assembly
Optical Filter assembly

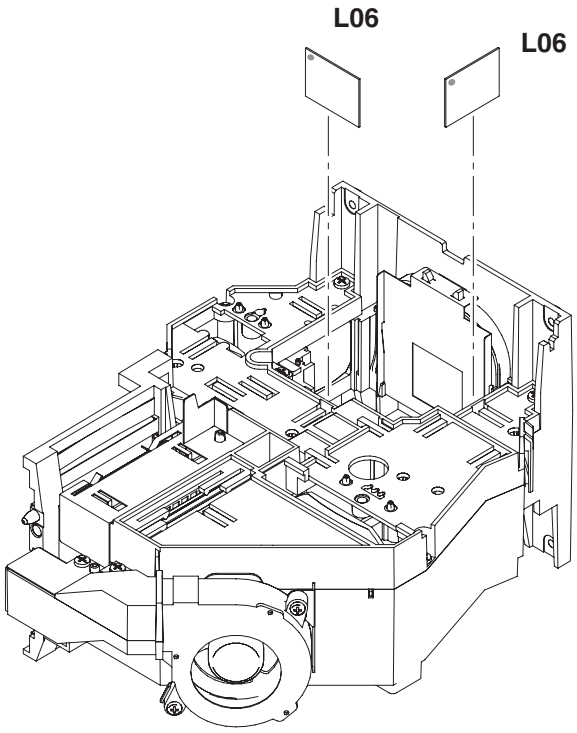


Note:
Only the Blue panel assy provides TH902 and M10.

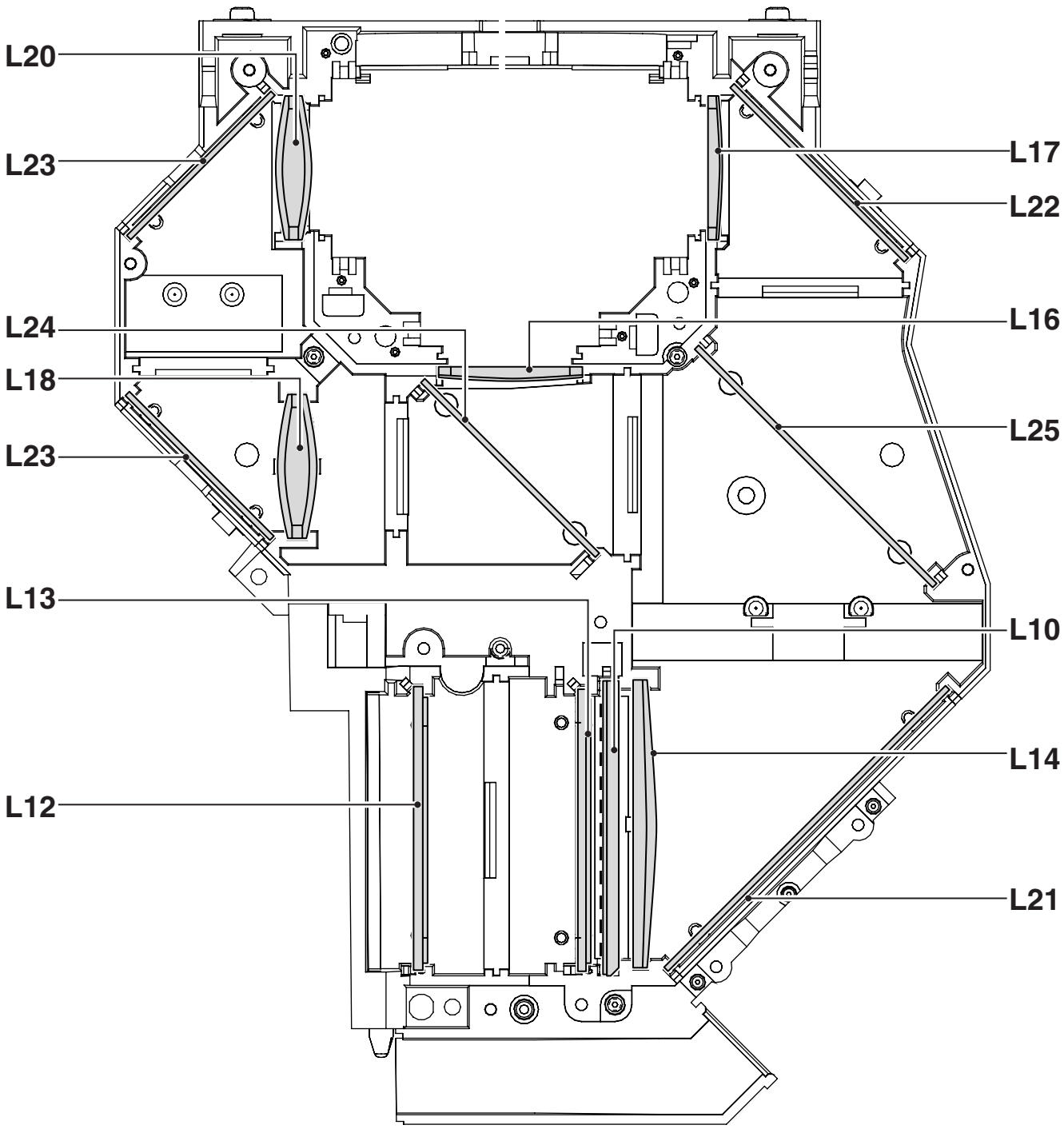


Parts Location Diagrams

Polarized glass(GB)

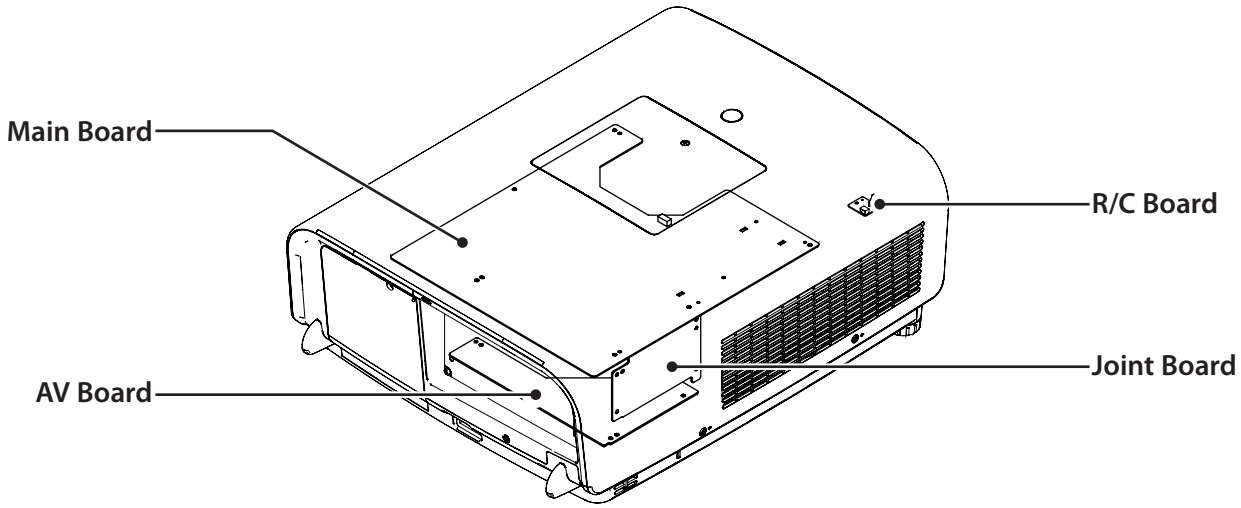


In the Optical Unit

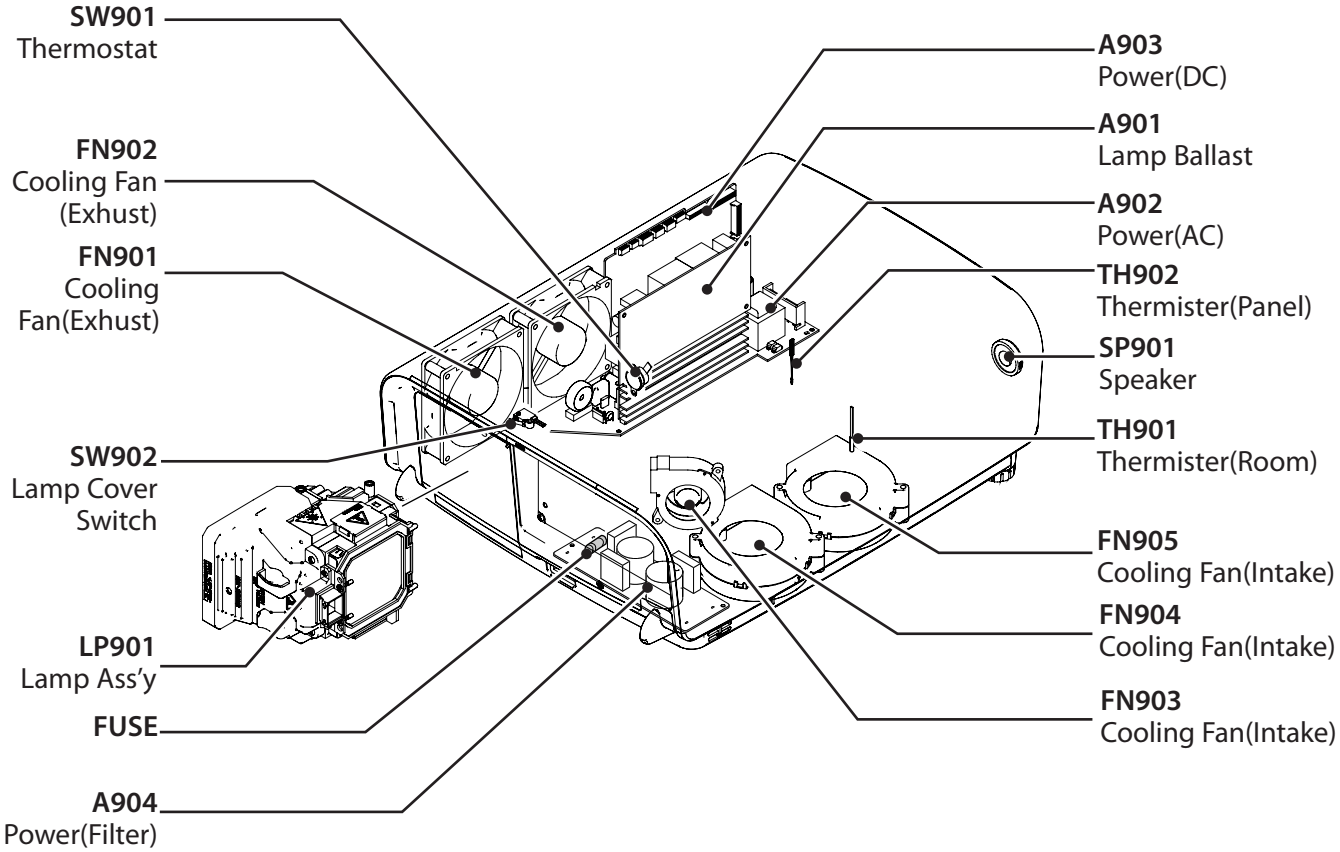


Electrical Parts Location

● Assemblied Boards



● Out Of Circuit Board



Mechanical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

Key No.	Part No.	Description
CABINET PARTS		
C01	910 330 7566	ASSY,STAND LEG-MZ7A
C02	910 330 7269	BUTTON CTRL-MZ7A
C03	910 330 7559	BUTTON LNS A-MZ7A
C04	910 330 7535	BUTTON LNS B-MZ7A
C05	610 338 7116	CABINET TOP-KF7AL
C06	910 330 7245	CABINET BOTTOM-MZ7A
C07	610 332 4005	COVER WITHOUT LNS-MZ7AL
C08	910 330 7238	COVER LNS TOP-MZ7A
C09	910 330 7399	COVER LNS BTM-MZ7A
C10	910 330 7573	DEC LED-MZ7A
C11	910 295 3085	DEC LEG-MW6A
C12	910 302 5613	DEC SHEET-M4JA
C13	910 330 7443	DEC AV SHEET-MZ7A
C14	910 330 7184	FILTER BASE-MZ7A
C15	910 323 6767	HOLDER SPEAKER-MT5A
C16	910 330 7191	PANEL AV-MZ7A
C17	910 330 7368	PANEL LMP-MZ7A
C18	910 330 7412	PANEL FILTER-MZ7A
C19	610 339 7702	COMPL,PANEL PRM-MZ7A
C20	910 330 7542	PANEL PJNET-MZ7A
C21	910 297 7920	SPACER COVER NWMG-MA8AA
C22	910 297 7937	SPACER COVER SCREW NWMG-MA8AA
C23	910 330 7436	SPRING BUTTON LNS-MZ7A
CHASSIS PARTS		
M01	610 339 6446	COMPL,MOUNTING LNS-KP3AL
M01-1	945 088 7681	ASSY,MOTOR LENS MZ7A
M01-2	645 089 4886	UNIT,LENS,SHIFT-X
M01-3	645 089 4893	UNIT,LENS,SHIFT-Y
M02	610 335 8369	COVER DUCT PANEL TOP-KP3AL
M03	910 330 8129	COVER DUCT PANEL IN-MZ7A
M04	910 330 8204	HOLDER POL IN-MZ7A
M05	610 335 7997	HOLDER POL IN-KP3AL
M06	610 338 7130	HOLDER OPTICAL FILTER IN-KF7AL
M07	610 338 2173	HOLDER CON BALLAST-KP3AL
M08	910 330 8075	MOUNTING LNS CON A-MZ7A
M09	910 330 7740	MOUNTING LNS REL A-MZ7A
M10	610 331 9070	STOPPER THERM POL IN-MZ7A
M11	910 330 8082	OPTICAL BASE TOP-MZ7A
M12	910 330 8310	OPTICAL BASE BTM-MZ7A
SCREWS		
S01	411 031 9304	SCR BIN 3X8
S02	312 069 7402	SPECIAL SCREW NI
S03	411 189 6507	BOLT HEX-SCT+SW+W 2.5X5
S04	411 189 6606	BOLT HEX-SCT 2.5X6
OPTICAL PARTS		
TYPE-L LCD PANEL/PRISM ASS'Y		
L02L	610 340 6114	ASSY LCD/PSM RLR-KF7AL
L02L-1	645 097 0283	POLARIZED GLASS(OUT/R)
L02L-2	645 093 9181	POLARIZED GLASS(OUT/G)
L02L-3	645 093 9204	POLARIZED GLASS(OUT/B)
L02L-4	645 093 9174	PREPOLARIZED GLASS(OUT/G)
L02L-5	645 095 5457	PREPOLARIZED GLASS(OUT/B)
TYPE-R LCD PANEL/PRISM ASS'Y		
L02R	610 340 6107	ASSY LCD/PSM LRL-KF7AL
L02R-1	645 097 0283	POLARIZED GLASS(OUT/R)
L02R-2	645 093 9181	POLARIZED GLASS(OUT/G)
L02R-3	645 093 9204	POLARIZED GLASS(OUT/B)
L02R-4	645 093 9174	PREPOLARIZED GLASS(OUT/G)
L02R-5	645 095 5457	PREPOLARIZED GLASS(OUT/B)

Key No.	Part No.	Description
COMMON PARTS		
L03	645 096 1953	OPTICAL FILTER (ICT)
L04	645 096 1953	OPTICAL FILTER (ICT)
L05	645 096 1953	OPTICAL FILTER (ICT)
L06	645 093 9129	POLARIZED GLASS(IN/GB)
L07	645 093 9150	POLARIZED GLASS(IN/R)
L08	645 093 9136	POLARIZED GLASS(IN/G)
L09	645 093 9143	POLARIZED GLASS(IN/B)
L10	945 088 7223	ASSY,PRISM(PBS)
L11	645 090 0600	LENS,PROJECTION-SM
L12	945 088 7254	LENS,INTEGRATOR(IN)
L13	945 088 7261	LENS,INTEGRATOR(OUT)
L14	645 094 6752	LENS,CONDENSER(IN)
L15	645 096 3926	LENS,CONDENSER(OUT)
L16	645 094 7117	LENS,CONDENSER(G)
L17	945 088 7346	LENS,CONDENSER(B)
L18	945 088 7353	LENS,RELAY(IN)
L19	945 088 7360	LENS,RELAY(OUT)
L20	945 088 7377	LENS,CONDENSER(R)
L21	945 088 7384	MIRROR(W-COLD)
L22	945 088 7391	MIRROR(B)
L23	945 088 7407	MIRROR(R)
L24	945 055 5405	DICHROIC MIRROR (G)
L25	645 094 7124	DICHROIC MIRROR (B)

* There are 2 types (Type-L or Type-R) of LCD Panel/Prism Ass'y. Used type is indicatyed on the Prism Ass's and Cabinet top. Refter to item "LCD Panel/Prism Ass'y Removal" for further information.

Electrical Parts List

Product safety should be considered when a component replacement is made in any area of a projector.
Components indicated by a ⚠ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

● Read Description in the parts list

Read description in the Capacitor and Resistor as follows:

CAPACITOR CERAMIC 100P K 50V

- 50V — Rated Voltage
- K — Tolerance Symbols:

Less than 10pF

A : Not specified	B : ±0.1pF	C : ±0.25pF
D : ±0.5pF	E : +0 -1pF	F : ±1PF
G : ±2pF	H : +0.1 -0pF	L : +0 -0.1pF
R : ±0.25 -0pF	S : +0-0.25pF	

More than 10pF

A : Not specified	B : ±0.1%	C : ±0.25%
D : ±0.5%	F : ±1%	G : ±2%
H : ±3%	J : ±5%	K : ±10%
L : ±15%	M : ±20%	N : ±30%
P : +100-0%	Q : +30-10%	T : +50-10%
U : +75-10%	V : +20-10%	W : +100-10%
X : +40-20%	Y : +150-10%	Z : +80-20%

- 100P — Rated value: P=pico farad, U=micro farad
- CERAMIC — Material:

CERAMIC	Ceramic
MT-PAPER	Metallized Paper
POLYESTER	Polyester
MT-POLYEST	Metallized Polyester
POLYPRO	Polypropylene
MT-POLYPRO	Metallized Polypropylene
COMPO FILM	Composite film
MT-COMPO	Metallized Composite
STYRENE	Styrene
TA-SOLID	Tantalum Oxide Solid Electrolytic
AL-SOLID	Aluminium Solid Electrolytic
ELECT	Aluminum Foil Electrolytic
NP-ELECT	Non-polarised Electrolytic
OS-SOLID	Aluminium Solid with Organic Semiconductive Electrolytic
POS-SOLID	Polymerized Organic Semiconductive
DL-ELECT	Double Layered Electrolytic
PPS-FILM	Polyphenylene Sulfide Film
MT-PPS-FILM	Metalized Polyphenylene Sulfide Film
MT-PEN-FILM	Metalized Polyethylenenaphthalate Film
CAPACITOR	Other

RESISTOR CARBON 4.7K J A 1/4W

- 1/4W — Rated Wattage
- A — Performance Symbols:
  A: General B: Non flammable Z: Low noise
  Other: Temperature coefficient

T: ±10ppm/°C	U: ±25ppm/°C	C: ±50ppm/°C
D: ±100ppm/°C	E: ±200ppm/°C	F: ±250ppm/°C
G: ±350ppm/°C	H: ±1000ppm/°C±10%	W: ±1200ppm/°C±10%
Y: ±1400ppm/°C±10%	J: ±2000ppm/°C±10%	K: ±2400ppm/°C±10%
L: ±2700ppm/°C±10%	M: ±3000ppm/°C±10%	N: ±3300ppm/°C±10%
P: ±3600ppm/°C±10%	Q: ±3900ppm/°C±10%	R: ±4200ppm/°C±10%
S: ±4300ppm/°C±10%	V: ±4500ppm/°C±10%	X: ±8000ppm/°C±10%

- J — Tolerance Symbols:
  A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5%
  F: ±1% G: ±2% J: ±5% K: ±10%
  M: ±20% P: +5-15% Z: 0 ohm
- 4.7K — Rated value, ohms:
  K: 1,000, M: 1,000,000
- CARBON — Material:

CARBON	Carbon
MT-FILM	Metal Film
OXIDE-MT	Oxide Metal Film
SOLID	Composition
MT-GLAZE	Metal Glaze
WIRE WOUND	Wire Wound
CERAMIC RES.	Ceramic
FUSIBLE RES.	Fusible
RESISTOR	Other

Electrical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

Key No.	Part No.	Description
ASSEMBLED BOARDS		
⚠	**610 335 3128**	**ASSY,PWB,A/V KP3AL**
⚠	**610 335 3166**	**ASSY,PWB,NETWORK JOINT KP**
⚠	**610 335 3135**	**ASSY,PWB,R/C. FRONT KP3AL**
⚠	**610 338 0049**	**ASSY PWB,MAIN KF7AL**
SERVICE TOOLS		
	610 340 8811	CD-ROM,PJ SVC TOOL V411
OUT OF CIRCUIT BOARD		
L901	945 003 3835	CORE,FERRITE
L902	945 003 3835	CORE,FERRITE
⚠ LP901	610 335 8093	COMPL,OPTICAL LMP-KP3AL
	945 003 3811	CORE,FERRITE
⚠ A901	645 093 0980	UNIT,BALLAST
	610 339 2325	CABLE,BALLAST SERVICE KP3AL
⚠ A902	645 093 0089	UNIT,POWER(AC)
⚠ A903	645 095 9981	UNIT,POWER(DC)
⚠ A904	645 093 0096	UNIT,POWER(FILTER)
⚠ FN901	945 088 7049	MOTOR,FAN DC 3.36W
⚠ FN902	945 088 7063	MOTOR,FAN DC 4.20W
⚠ FN903	645 093 8481	MOTOR,BLW DC 2.76W
⚠ FN904	645 093 8498	MOTOR,BLW DC 15.0W
⚠ FN905	645 093 8504	MOTOR,BLW DC 15.0W
SP901	945 078 6106	SPEAKER,8
⚠ SW901	645 089 4879	THERMOSTATS
⚠ SW902	645 089 4916	SWITCH,PUSH
⚠ TH901	945 079 7775	SWITCH,THERMAL,THERMISTOR
⚠ TH902	945 079 7768	SWITCH,THERMAL,THERMISTOR
⚠ FUSE	323 027 2605	FUSE 250V 10A
610 335 3128 ASSY,PWB,A/V KP3AL		
TRANSISTOR		
Q2001	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2011	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2021	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2071	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5031	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5032	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5041	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5042	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5046	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5047	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
INTEGRATED CIRCUIT		
IC5001	309 564 1519	IC NJW1141M
CAPACITOR		
C2001	303 358 3215	CERAMIC 10U K 6.3V
	303 368 7319	CERAMIC 10U K 6.3V
C2002	303 367 0410	CERAMIC 0.1U K 50V
C2011	303 367 0410	CERAMIC 0.1U K 50V
C2012	303 367 0410	CERAMIC 0.1U K 50V
C2021	303 358 3215	CERAMIC 10U K 6.3V
	303 368 7319	CERAMIC 10U K 6.3V
C2022	303 367 0410	CERAMIC 0.1U K 50V
C2031	303 367 0410	CERAMIC 0.1U K 50V
C2061	303 157 3614	CERAMIC 100P J 50V

Electrical Parts List

Key No.	Part No.	Description		
C2062	303 157 3614	CERAMIC	100P J	50V
C2071	303 367 0410	CERAMIC	0.1U K	50V
C2072	303 372 7510	CERAMIC	2.2U K	6.3V
C2073	303 367 0410	CERAMIC	0.1U K	50V
C2077	303 157 3614	CERAMIC	100P J	50V
C2096	303 367 0410	CERAMIC	0.1U K	50V
C4051	303 157 6615	CERAMIC	470P K	50V
C4052	303 367 0410	CERAMIC	0.1U K	50V
C4053	303 398 4111	ELECT	47U M	16V
	303 387 6515	ELECT	47U M	16V
C4061	303 367 0410	CERAMIC	0.1U K	50V
C4092	303 367 0410	CERAMIC	0.1U K	50V
C5001	303 367 0410	CERAMIC	0.1U K	50V
C5002	303 367 0410	CERAMIC	0.1U K	50V
C5003	303 367 0410	CERAMIC	0.1U K	50V
C5004	303 215 2214	CERAMIC	0.01U K	50V
C5006	303 113 4112	CERAMIC	2200P K	50V
C5007	303 367 0410	CERAMIC	0.1U K	50V
C5008	303 358 8319	CERAMIC	1U K	10V
C5009	303 358 8319	CERAMIC	1U K	10V
C5011	303 367 0410	CERAMIC	0.1U K	50V
C5012	303 367 0410	CERAMIC	0.1U K	50V
C5013	303 367 0410	CERAMIC	0.1U K	50V
C5014	303 215 2214	CERAMIC	0.01U K	50V
C5016	303 113 4112	CERAMIC	2200P K	50V
C5017	303 367 0410	CERAMIC	0.1U K	50V
C5018	303 398 4111	ELECT	47U M	16V
	303 387 6515	ELECT	47U M	16V
C5021	303 374 4210	CERAMIC	0.33U K	10V
C5022	303 358 8319	CERAMIC	1U K	10V
C5023	303 358 8319	CERAMIC	1U K	10V
C5024	303 358 8319	CERAMIC	1U K	10V
C5026	303 367 0410	CERAMIC	0.1U K	50V
C5031	303 367 0410	CERAMIC	0.1U K	50V
C5032	303 367 0410	CERAMIC	0.1U K	50V
C5041	303 367 0410	CERAMIC	0.1U K	50V
C5042	303 397 6611	ELECT	10U M	25V
	303 387 6812	ELECT	10U M	25V
C5046	303 367 0410	CERAMIC	0.1U K	50V
C5047	303 397 6611	ELECT	10U M	25V
	303 387 6812	ELECT	10U M	25V
RESISTOR				
R2001	301 260 4115	MT-GLAZE	75 JA	1/3W
R2002	301 256 6314	MT-GLAZE	47K JA	1/10W
R2003	301 256 5317	MT-GLAZE	56K JA	1/10W
R2004	301 162 3612	MT-GLAZE	470 JA	1/10W
R2006	301 150 6212	MT-GLAZE	1K JA	1/10W
R2007	301 255 6513	MT-GLAZE	100 JA	1/10W
R2011	301 260 4115	MT-GLAZE	75 JA	1/3W
R2012	301 256 6314	MT-GLAZE	47K JA	1/10W
R2013	301 256 5317	MT-GLAZE	56K JA	1/10W
R2014	301 162 3612	MT-GLAZE	470 JA	1/10W
R2016	301 150 6212	MT-GLAZE	1K JA	1/10W
R2017	301 255 6513	MT-GLAZE	100 JA	1/10W
R2021	301 260 4115	MT-GLAZE	75 JA	1/3W
R2022	301 256 6314	MT-GLAZE	47K JA	1/10W
R2023	301 256 5317	MT-GLAZE	56K JA	1/10W
R2024	301 162 3612	MT-GLAZE	470 JA	1/10W
R2026	301 150 6212	MT-GLAZE	1K JA	1/10W
R2027	301 255 6513	MT-GLAZE	100 JA	1/10W
R2031	301 255 6513	MT-GLAZE	100 JA	1/10W
R2051	301 150 5819	MT-GLAZE	100K JA	1/10W
R2052	301 150 5819	MT-GLAZE	100K JA	1/10W
R2053	301 150 5819	MT-GLAZE	100K JA	1/10W
R2054	301 150 5819	MT-GLAZE	100K JA	1/10W
R2056	301 150 5819	MT-GLAZE	100K JA	1/10W

Key No.	Part No.	Description		
R2057	301 150 5819	MT-GLAZE	100K JA	1/10W
R2061	301 255 6513	MT-GLAZE	100 JA	1/10W
R2062	301 255 6513	MT-GLAZE	100 JA	1/10W
R2063	301 150 5819	MT-GLAZE	100K JA	1/10W
R2064	301 150 5819	MT-GLAZE	100K JA	1/10W
R2071	301 150 5819	MT-GLAZE	100K JA	1/10W
R2072	301 150 5819	MT-GLAZE	100K JA	1/10W
R2073	301 255 6018	MT-GLAZE	1M JA	1/10W
R2074	301 162 3018	MT-GLAZE	22K JA	1/10W
R2076	301 255 6513	MT-GLAZE	100 JA	1/10W
R2077	301 162 2219	MT-GLAZE	10 JA	1/10W
R2091	301 150 5918	MT-GLAZE	10K JA	1/10W
R2092	301 255 6513	MT-GLAZE	100 JA	1/10W
R2093	301 255 6513	MT-GLAZE	100 JA	1/10W
R2096	301 255 6513	MT-GLAZE	100 JA	1/10W
R2097	301 150 5819	MT-GLAZE	100K JA	1/10W
R4001	301 264 9611	MT-GLAZE	36 FA	1/10W
R4002	301 264 9611	MT-GLAZE	36 FA	1/10W
R4003	301 264 9611	MT-GLAZE	36 FA	1/10W
R4004	301 265 4912	MT-GLAZE	75 FA	1/10W
R4006	301 265 4912	MT-GLAZE	75 FA	1/10W
R4007	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4008	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4009	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4011	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4012	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4031	301 255 6513	MT-GLAZE	100 JA	1/10W
R4032	301 255 6513	MT-GLAZE	100 JA	1/10W
R4041	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4042	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4051	301 255 6513	MT-GLAZE	100 JA	1/10W
R4052	301 256 5614	MT-GLAZE	47 JA	1/10W
R4061	301 255 6513	MT-GLAZE	100 JA	1/10W
R4064	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4066	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4071	301 162 2219	MT-GLAZE	10 JA	1/10W
R4072	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R4073	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R5001	301 255 6513	MT-GLAZE	100 JA	1/10W
R5003	301 255 6513	MT-GLAZE	100 JA	1/10W
R5006	301 255 6513	MT-GLAZE	100 JA	1/10W
R5008	301 255 6513	MT-GLAZE	100 JA	1/10W
R5011	301 255 6513	MT-GLAZE	100 JA	1/10W
R5013	301 255 6513	MT-GLAZE	100 JA	1/10W
R5021	301 256 2910	MT-GLAZE	150 JA	1/10W
R5022	301 256 2910	MT-GLAZE	150 JA	1/10W
R5031	301 162 3612	MT-GLAZE	470 JA	1/10W
R5032	301 162 2417	MT-GLAZE	1.2K JA	1/10W
R5033	301 150 6212	MT-GLAZE	1K JA	1/10W
R5036	301 162 3612	MT-GLAZE	470 JA	1/10W
R5037	301 162 2417	MT-GLAZE	1.2K JA	1/10W
R5038	301 150 6212	MT-GLAZE	1K JA	1/10W
R5041	301 150 6212	MT-GLAZE	1K JA	1/10W
R5042	301 162 2417	MT-GLAZE	1.2K JA	1/10W
R5043	301 162 2417	MT-GLAZE	1.2K JA	1/10W
R5044	301 150 6212	MT-GLAZE	1K JA	1/10W
R5045	301 150 6212	MT-GLAZE	1K JA	1/10W
R5046	301 150 6212	MT-GLAZE	1K JA	1/10W
R5047	301 162 2417	MT-GLAZE	1.2K JA	1/10W
R5048	301 162 2417	MT-GLAZE	1.2K JA	1/10W
R5049	301 150 6212	MT-GLAZE	1K JA	1/10W
COIL				
L2001	945 086 7461	FILTER,EMI 100MHZ		
L2011	945 086 7461	FILTER,EMI 100MHZ		
L2021	945 086 7461	FILTER,EMI 100MHZ		
L2031	945 086 7461	FILTER,EMI 100MHZ		

Electrical Parts List

Key No.	Part No.	Description		
L2051	945 086 7454	FILTER,EMI 50MHZ		
L2052	945 086 7454	FILTER,EMI 50MHZ		
L2053	945 086 7454	FILTER,EMI 50MHZ		
L2054	945 086 7454	FILTER,EMI 50MHZ		
L2056	945 086 7454	FILTER,EMI 50MHZ		
L2057	945 086 7454	FILTER,EMI 50MHZ		
L2061	945 086 7454	FILTER,EMI 50MHZ		
L2062	945 086 7454	FILTER,EMI 50MHZ		
L2091	945 086 7454	FILTER,EMI 50MHZ		
L2092	945 086 7454	FILTER,EMI 50MHZ		
L4001	945 086 7577	FILTER,EMI 400MHZ		
L4002	945 086 7577	FILTER,EMI 400MHZ		
L4003	945 086 7577	FILTER,EMI 400MHZ		
L4004	945 086 7577	FILTER,EMI 400MHZ		
L4006	945 086 7577	FILTER,EMI 400MHZ		
L4031	945 086 7454	FILTER,EMI 50MHZ		
L4032	945 086 7454	FILTER,EMI 50MHZ		
L4042	945 070 3660	INDUCTOR,90 OHM		
L4043	945 086 6037	IMPEDANCE,330 OHM P		
L4071	945 073 6408	IMPEDANCE,100 OHM -		
L4072	945 073 6408	IMPEDANCE,100 OHM -		
L4073	945 073 6408	IMPEDANCE,100 OHM -		
L4079	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
L4082	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
L4083	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
L4084	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
L4086	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
L4087	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
L4092	945 086 5368	IMPEDANCE,220 OHM P		
L5021	945 041 1978	INDUCTOR,330 OHM		
DIODE				
D2031	307 223 0514	ZENER DIODE 02DZ12Y(TPH3)		
	307 221 7119	ZENER DIODE UDZS-TE-1712B		
D2071	307 163 0414	DIODE 1SS352-(TPH3)		
D2091	307 223 7315	PC TLP421F(D4-GB-TP4)		
D2092	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		
	307 209 1214	ZD UDZS-TE-176.2B		
D2093	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		
	307 209 1214	ZD UDZS-TE-176.2B		
D2097	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		
	307 209 1214	ZD UDZS-TE-176.2B		
D4041	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		
	307 209 1214	ZD UDZS-TE-176.2B		
D5041	307 163 0414	DIODE 1SS352-(TPH3)		
D5046	307 163 0414	DIODE 1SS352-(TPH3)		
MISCELLANEOUS				
A4051	945 082 0466	UNIT,REMOCON RECEIVER		
K20A	945 067 6124	TERMINAL,BOARD		
K20B	945 076 2735	JACK,RCA-2		
K20C	945 076 2742	JACK,PHON D3.6		
K20D	945 076 2742	JACK,PHON D3.6		
K40A	645 089 7702	SOCKET,D-SUB 15P		
K40B	945 041 1077	SOCKET,DIN 8P		
K40C	645 095 2647	SOCKET,USB 4P		
K40D	945 087 1208	PLUG,D-SUB 25P		
SC2001	945 076 3503	SURGE-ABSORBER		
SC2011	945 076 3503	SURGE-ABSORBER		
SC2021	945 076 3503	SURGE-ABSORBER		
SC2051	945 076 3503	SURGE-ABSORBER		
SC2052	945 076 3503	SURGE-ABSORBER		
SC2053	945 076 3503	SURGE-ABSORBER		
SC2054	945 076 3503	SURGE-ABSORBER		
SC2056	945 076 3503	SURGE-ABSORBER		
SC2057	945 076 3503	SURGE-ABSORBER		
SC4031	945 076 3503	SURGE-ABSORBER		
SC4032	945 076 3503	SURGE-ABSORBER		
SC4041	945 076 3503	SURGE-ABSORBER		
SC4042	945 076 3503	SURGE-ABSORBER		
SC4061	945 076 3503	SURGE-ABSORBER		
SC4071	945 076 3503	SURGE-ABSORBER		
SC4072	945 076 3503	SURGE-ABSORBER		
SC4073	945 076 3503	SURGE-ABSORBER		
SC4074	945 076 3503	SURGE-ABSORBER		
SC4076	945 076 3503	SURGE-ABSORBER		
SC4078	945 076 3503	SURGE-ABSORBER		
SC4079	945 076 3503	SURGE-ABSORBER		
SW4061	945 010 7659	SWITCH,PUSH 1P-1TX1		

610 335 3166 ASSY,PWB,NETWORK JOINT KP

TRANSISTOR				
Q3031	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
INTEGRATED CIRCUIT				
IC3031	309 673 9819	IC PQ070XNA1ZPH		
IC3041	309 673 9819	IC PQ070XNA1ZPH		
CAPACITOR				
C3031	303 358 8319	CERAMIC	1U K	10V
C3032	303 358 8319	CERAMIC	1U K	10V
C3033	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C3041	303 358 8319	CERAMIC	1U K	10V
C3042	303 358 8319	CERAMIC	1U K	10V
C3043	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
RESISTOR				
R3031	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R3032	301 150 5918	MT-GLAZE	10K JA	1/10W
R3033	301 264 1813	MT-GLAZE	1K FA	1/10W
R3034	301 255 9019	MT-GLAZE	82 JA	1/10W
R3036	301 264 4210	MT-GLAZE	1.6K FA	1/10W
R3037	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R3038	301 150 5918	MT-GLAZE	10K JA	1/10W
R3039	301 150 5918	MT-GLAZE	10K JA	1/10W
R3041	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R3042	301 150 5918	MT-GLAZE	10K JA	1/10W
R3043	301 264 1813	MT-GLAZE	1K FA	1/10W
R3044	301 256 6512	MT-GLAZE	68 JA	1/10W
R3046	301 264 8812	MT-GLAZE	3K FA	1/10W
R3047	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
DIODE				
D3031	307 205 5216	DIODE RB521S-30-TE61		
D3041	307 163 0414	DIODE 1SS352-(TPH3)		

610 335 3135 ASSY,PWB,R/C. FRONT KP3AL

CAPACITOR				
C2821	303 398 4111	ELECT	47U M	16V
	303 387 6515	ELECT	47U M	16V
C2822	303 157 6615	CERAMIC	470P K	50V
C2823	303 358 8319	CERAMIC	1U K	10V
RESISTOR				

Electrical Parts List

Key No.	Part No.	Description
R2821	301 256 5614	MT-GLAZE 47 JA 1/10W
R2822	301 162 2219	MT-GLAZE 10 JA 1/10W
MISCELLANEOUS		
A2821	945 082 0466	UNIT,REMOCON RECEIVER

610 338 0049 ASSY PWB,MAIN KF7AL

Key No.	Part No.	Description
TRANSISTOR		
Q1001	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q1061	305 217 5019	TR RN1117 TE85L
Q1361	305 211 1918	TR RJU002N06
Q1363	305 211 1918	TR RJU002N06
Q1366	305 211 1918	TR RJU002N06
Q1368	305 211 1918	TR RJU002N06
Q2801	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2802	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2851	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2852	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2853	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2854	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2856	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2857	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q2858	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q331	305 211 1918	TR RJU002N06
Q3802	305 211 1918	TR RJU002N06
Q4621	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q4811	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q4812	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5121	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5141	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5151	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5202	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S

Electrical Parts List

Key No.	Part No.	Description
Q5221	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5231	305 211 1918	TR RJU002N06
Q5232	305 211 1918	TR RJU002N06
Q5251	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5252	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5253	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5301	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5302	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5303	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5304	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5331	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5332	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5333	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5334	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5336	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5501	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5551	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q5601	305 217 6917	TR TPC6107 TE85L
Q5641	305 217 6917	TR TPC6107 TE85L
Q5671	305 002 8327	TR 2SA1203-Y-TE12L
Q5672	305 217 4913	TR RN1111 TE85L
Q6531	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q6561	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q6671	305 217 6917	TR TPC6107 TE85L
Q7241	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q8111	305 217 5019	TR RN1117 TE85L
Q861	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
Q862	305 014 4512	TR 2SC2412K T146 R
	305 014 4611	TR 2SC2412K T146 S

Electrical Parts List

Key No.	Part No.	Description
	305 015 8727	TR 2SC2812-L6-TB
	305 015 8925	TR 2SC2812-L7-TB
	305 163 1615	TR 2SC2812N-L6-TB0
	305 173 9816	TR 2SC3928A1R
	305 173 9915	TR 2SC3928A1S
INTEGRATED CIRCUIT		
IC1061	310 517 6809	IC TC74LVX4053FT
IC1081	309 462 0327	IC 24LC21AT/SN
IC1301	310 616 3402	IC PST413A300NR
IC1311	410 643 4400	IC EDD2516AETA-5B-E
IC1331	410 643 4400	IC EDD2516AETA-5B-E
IC1346	310 614 6207	IC TC7SZ14FU(TE85L,F)
IC1371	309 439 8919	IC TC7WH125FU
IC1372	309 439 8919	IC TC7WH125FU
IC1391	310 538 4907	IC 24LC64T-I/SNG
IC1401	310 362 6504	IC TC74LCX541FT
IC1421	310 479 4004	IC TC7WBD125AFK
IC1431	309 487 5727	IC TC7SZ125FU
IC1801	309 671 7817	IC TE7783APF
	309 633 6117	IC TE7783PF
IC1821	310 595 8009	IC PQ1LAX95MSPQ
IC1881	310 362 6504	IC TC74LCX541FT
IC2811	310 596 0002	IC 74LVC1G125GW,125
IC301	409 686 5317	IC PW392C-30L
IC3401	310 600 5108	IC MSM56V16160J-8T3-K
IC3471	309 439 8919	IC TC7WH125FU
IC3472	309 439 8919	IC TC7WH125FU
IC3801	309 652 0714	IC HIN202EIBNZ-T
IC4401	410 631 4405	IC EP2C35F484C8N
IC4801	309 464 1411	IC TC74ACT14FT
IC4891	310 595 8009	IC PQ1LAX95MSPQ
IC5101	309 461 7822	IC PQ20WZ11
IC5111	410 643 5100	IC PQ070XNB1ZPH
IC5121	309 594 1916	IC LM4889MM
IC5291	410 643 5100	IC PQ070XNB1ZPH
IC5301	309 461 7317	IC AD8057ARTZ-REEL7
IC5321	309 484 2016	IC BA7078AF-E2
IC5341	309 462 2311	IC TC7SZ04FU-TE852
IC5351	309 462 2311	IC TC7SZ04FU-TE852
IC5501	309 362 1127	IC BA6287F
IC5551	309 362 1127	IC BA6287F
IC5611	309 531 6229	IC FA7701V-TE1
IC5621	310 595 8009	IC PQ1LAX95MSPQ
IC5631	310 595 8009	IC PQ1LAX95MSPQ
IC5651	309 531 6229	IC FA7701V-TE1
IC5661	310 595 8009	IC PQ1LAX95MSPQ
IC5681	410 643 5100	IC PQ070XNB1ZPH
IC5691	310 595 8009	IC PQ1LAX95MSPQ
IC5841	309 471 6713	IC TC7WH00FK(TE85L)
IC5851	309 488 5924	IC TC7WH04FK-TE85L
IC6261	410 643 5100	IC PQ070XNB1ZPH
IC6271	310 595 8009	IC PQ1LAX95MSPQ
IC6281	310 595 8009	IC PQ1LAX95MSPQ
IC6501	309 400 7118	IC TC7W53FU-(TE12L)
IC6531	309 537 6213	IC BA6920FP-YE2
IC6541	309 400 7118	IC TC7W53FU-(TE12L)
IC6561	309 537 6213	IC BA6920FP-YE2
IC6681	309 531 6229	IC FA7701V-TE1
IC6691	310 595 8009	IC PQ1LAX95MSPQ
IC7201	310 605 1709	IC XC3S50-4TQG144C
IC7281	410 643 5100	IC PQ070XNB1ZPH
IC7291	410 643 5100	IC PQ070XNB1ZPH
IC7601	410 643 5100	IC PQ070XNB1ZPH
IC7611	410 642 7303	IC PQ015YZ01ZPH
IC7621	309 461 7822	IC PQ20WZ11
IC7641	410 643 5100	IC PQ070XNB1ZPH
IC7651	310 595 8009	IC PQ1LAX95MSPQ
IC7661	310 595 8009	IC PQ1LAX95MSPQ
IC8001	410 641 3801	IC SII17169CTU
IC801	410 666 8805	IC S29GL064A90TFIR30-0860-A
IC8101	309 558 7213	IC 24C02CT-I/SNG
IC8121	310 479 4004	IC TC7WBD125AFK
IC8131	309 400 7118	IC TC7W53FU-(TE12L)
IC8141	309 400 7118	IC TC7W53FU-(TE12L)
IC861	310 362 6504	IC TC74LCX541FT
IC8801	310 595 8009	IC PQ1LAX95MSPQ
CAPACITOR		
C1001	303 409 3426	CERAMIC 0.1U K 16V
C1031	303 433 1112	CERAMIC 1U K 10V
C1032	303 433 1112	CERAMIC 1U K 10V
C1033	303 433 1112	CERAMIC 1U K 10V
C1051	303 433 1112	CERAMIC 1U K 10V
C1052	303 433 1112	CERAMIC 1U K 10V
C1053	303 433 1112	CERAMIC 1U K 10V
C1061	303 409 3426	CERAMIC 0.1U K 16V
C1081	303 409 3426	CERAMIC 0.1U K 16V
C1091	303 358 3215	CERAMIC 10U K 6.3V
	303 368 7319	CERAMIC 10U K 6.3V
C1092	303 394 1312	ELECT 100U M 6.3V
	303 427 9315	ELECT 100U M 6.3V
	303 387 4917	ELECT 100U M 6.3V
C1301	303 398 4111	ELECT 47U M 16V
	303 387 6515	ELECT 47U M 16V
C1302	303 409 3426	CERAMIC 0.1U K 16V
C1304	303 441 9810	CERAMIC 0.01U K 50V
C1306	303 276 1317	CERAMIC 1000P K 50V
C1311	303 409 3426	CERAMIC 0.1U K 16V
C1312	303 409 3426	CERAMIC 0.1U K 16V
C1313	303 409 3426	CERAMIC 0.1U K 16V
C1314	303 409 3426	CERAMIC 0.1U K 16V
C1316	303 409 3426	CERAMIC 0.1U K 16V
C1317	303 409 3426	CERAMIC 0.1U K 16V
C1318	303 409 3426	CERAMIC 0.1U K 16V
C1319	303 409 3426	CERAMIC 0.1U K 16V
C1321	303 358 3215	CERAMIC 10U K 6.3V
	303 368 7319	CERAMIC 10U K 6.3V
C1322	303 409 3426	CERAMIC 0.1U K 16V
C1323	303 409 3426	CERAMIC 0.1U K 16V
C1324	303 409 3426	CERAMIC 0.1U K 16V
C1326	303 409 3426	CERAMIC 0.1U K 16V
C1327	303 409 3426	CERAMIC 0.1U K 16V
C1328	303 409 3426	CERAMIC 0.1U K 16V
C1331	303 409 3426	CERAMIC 0.1U K 16V
C1332	303 409 3426	CERAMIC 0.1U K 16V
C1333	303 409 3426	CERAMIC 0.1U K 16V
C1334	303 409 3426	CERAMIC 0.1U K 16V
C1336	303 409 3426	CERAMIC 0.1U K 16V
C1337	303 409 3426	CERAMIC 0.1U K 16V
C1338	303 409 3426	CERAMIC 0.1U K 16V
C1339	303 409 3426	CERAMIC 0.1U K 16V
C1346	303 409 3426	CERAMIC 0.1U K 16V
C1348	303 409 3426	CERAMIC 0.1U K 16V
C1351	303 314 5314	CERAMIC 5P C 50V
C1352	303 314 5314	CERAMIC 5P C 50V
C1353	303 276 3113	CERAMIC 33P J 50V
C1354	303 276 3113	CERAMIC 33P J 50V
C1371	303 409 3426	CERAMIC 0.1U K 16V
C1374	303 409 3426	CERAMIC 0.1U K 16V
C1391	303 409 3426	CERAMIC 0.1U K 16V
C1401	303 409 3426	CERAMIC 0.1U K 16V
C1431	303 409 3426	CERAMIC 0.1U K 16V
C1432	303 409 3426	CERAMIC 0.1U K 16V

Electrical Parts List

Key No.	Part No.	Description		
C1501	303 433 1112	CERAMIC	1U K	10V
C1502	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1503	303 433 1112	CERAMIC	1U K	10V
C1504	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1506	303 433 1112	CERAMIC	1U K	10V
C1507	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1508	303 433 1112	CERAMIC	1U K	10V
C1509	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1514	303 276 1317	CERAMIC	1000P K	50V
C1516	303 276 1317	CERAMIC	1000P K	50V
C1517	303 276 1317	CERAMIC	1000P K	50V
C1518	303 276 1317	CERAMIC	1000P K	50V
C1519	303 276 1317	CERAMIC	1000P K	50V
C1521	303 276 1317	CERAMIC	1000P K	50V
C1522	303 276 1317	CERAMIC	1000P K	50V
C1523	303 276 1317	CERAMIC	1000P K	50V
C1524	303 276 1317	CERAMIC	1000P K	50V
C1526	303 276 1317	CERAMIC	1000P K	50V
C1531	303 433 1112	CERAMIC	1U K	10V
C1532	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1533	303 433 1112	CERAMIC	1U K	10V
C1534	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1536	303 433 1112	CERAMIC	1U K	10V
C1537	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1538	303 433 1112	CERAMIC	1U K	10V
C1539	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1544	303 276 1317	CERAMIC	1000P K	50V
C1546	303 276 1317	CERAMIC	1000P K	50V
C1547	303 276 1317	CERAMIC	1000P K	50V
C1548	303 276 1317	CERAMIC	1000P K	50V
C1549	303 276 1317	CERAMIC	1000P K	50V
C1551	303 276 1317	CERAMIC	1000P K	50V
C1552	303 276 1317	CERAMIC	1000P K	50V
C1553	303 276 1317	CERAMIC	1000P K	50V
C1554	303 276 1317	CERAMIC	1000P K	50V
C1556	303 276 1317	CERAMIC	1000P K	50V
C1561	303 433 1112	CERAMIC	1U K	10V
C1562	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1563	303 433 1112	CERAMIC	1U K	10V
C1564	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1566	303 433 1112	CERAMIC	1U K	10V
C1567	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1568	303 433 1112	CERAMIC	1U K	10V
C1569	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C1574	303 276 1317	CERAMIC	1000P K	50V
C1576	303 276 1317	CERAMIC	1000P K	50V
C1577	303 276 1317	CERAMIC	1000P K	50V
C1578	303 276 1317	CERAMIC	1000P K	50V
C1579	303 276 1317	CERAMIC	1000P K	50V
C1581	303 276 1317	CERAMIC	1000P K	50V
C1582	303 276 1317	CERAMIC	1000P K	50V
C1583	303 276 1317	CERAMIC	1000P K	50V
C1584	303 276 1317	CERAMIC	1000P K	50V
C1586	303 276 1317	CERAMIC	1000P K	50V
C1801	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
	403 458 7615	ELECT	100U M	16V
C1802	303 276 2819	CERAMIC	18P J	50V
C1803	303 276 2819	CERAMIC	18P J	50V
C1806	303 409 3426	CERAMIC	0.1U K	16V
C1808	303 409 3426	CERAMIC	0.1U K	16V
C1809	303 409 3426	CERAMIC	0.1U K	16V
C1811	303 409 3426	CERAMIC	0.1U K	16V
C1812	303 409 3426	CERAMIC	0.1U K	16V
C1813	303 433 1112	CERAMIC	1U K	10V
C1814	303 433 1112	CERAMIC	1U K	10V
C1816	303 433 1112	CERAMIC	1U K	10V
C1817	303 433 1112	CERAMIC	1U K	10V
C1818	303 433 1112	CERAMIC	1U K	10V
C1819	303 433 1112	CERAMIC	1U K	10V
C1821	303 409 3426	CERAMIC	0.1U K	16V
C1822	303 409 3426	CERAMIC	0.1U K	16V
C1823	303 409 3426	CERAMIC	0.1U K	16V
C1824	303 409 3426	CERAMIC	0.1U K	16V
C1826	303 409 3426	CERAMIC	0.1U K	16V
C1827	303 409 3426	CERAMIC	0.1U K	16V
C1828	303 409 3426	CERAMIC	0.1U K	16V
C1829	303 409 3426	CERAMIC	0.1U K	16V
C1831	303 409 3426	CERAMIC	0.1U K	16V
C1832	303 391 5115	ELECT	100U M	16V
	303 427 8417	ELECT	100U M	16V
	303 296 9515	ELECT	100U M	16V
C1834	303 409 3426	CERAMIC	0.1U K	16V
C1838	303 409 3426	CERAMIC	0.1U K	16V
C1839	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C1861	303 433 1112	CERAMIC	1U K	10V
C1862	303 409 3426	CERAMIC	0.1U K	16V
C1863	303 433 1112	CERAMIC	1U K	10V
C2501	303 397 8219	CERAMIC	2.2U K	25V
C2502	403 455 1418	CERAMIC	2.2U K	16V
C2503	403 455 1418	CERAMIC	2.2U K	16V
C2504	403 455 1418	CERAMIC	2.2U K	16V
C2506	403 455 1418	CERAMIC	2.2U K	16V
C2507	403 455 1418	CERAMIC	2.2U K	16V
C2508	403 455 1418	CERAMIC	2.2U K	16V
C2509	403 455 1418	CERAMIC	2.2U K	16V
C2511	403 455 1418	CERAMIC	2.2U K	16V
C2512	403 455 1418	CERAMIC	2.2U K	16V
C2513	403 455 1418	CERAMIC	2.2U K	16V
C2514	403 455 1418	CERAMIC	2.2U K	16V
C2516	403 455 1418	CERAMIC	2.2U K	16V
C2517	403 455 1418	CERAMIC	2.2U K	16V
C2518	403 455 1418	CERAMIC	2.2U K	16V
C2519	403 455 1418	CERAMIC	2.2U K	16V
C2521	403 455 1418	CERAMIC	2.2U K	16V
C2522	403 455 1418	CERAMIC	2.2U K	16V
C2523	403 455 1418	CERAMIC	2.2U K	16V
C2531	303 397 8219	CERAMIC	2.2U K	25V
C2532	403 455 1418	CERAMIC	2.2U K	16V
C2533	403 455 1418	CERAMIC	2.2U K	16V
C2534	403 455 1418	CERAMIC	2.2U K	16V
C2536	403 455 1418	CERAMIC	2.2U K	16V
C2537	403 455 1418	CERAMIC	2.2U K	16V
C2538	403 455 1418	CERAMIC	2.2U K	16V
C2539	403 455 1418	CERAMIC	2.2U K	16V
C2541	403 455 1418	CERAMIC	2.2U K	16V
C2542	403 455 1418	CERAMIC	2.2U K	16V
C2543	403 455 1418	CERAMIC	2.2U K	16V
C2544	403 455 1418	CERAMIC	2.2U K	16V
C2546	403 455 1418	CERAMIC	2.2U K	16V
C2547	403 455 1418	CERAMIC	2.2U K	16V

Electrical Parts List

Key No.	Part No.	Description		
C2548	403 455 1418	CERAMIC	2.2U K	16V
C2549	403 455 1418	CERAMIC	2.2U K	16V
C2551	403 455 1418	CERAMIC	2.2U K	16V
C2552	403 455 1418	CERAMIC	2.2U K	16V
C2553	403 455 1418	CERAMIC	2.2U K	16V
C2561	303 397 8219	CERAMIC	2.2U K	25V
C2562	403 455 1418	CERAMIC	2.2U K	16V
C2563	403 455 1418	CERAMIC	2.2U K	16V
C2564	403 455 1418	CERAMIC	2.2U K	16V
C2566	403 455 1418	CERAMIC	2.2U K	16V
C2567	403 455 1418	CERAMIC	2.2U K	16V
C2568	403 455 1418	CERAMIC	2.2U K	16V
C2569	403 455 1418	CERAMIC	2.2U K	16V
C2571	403 455 1418	CERAMIC	2.2U K	16V
C2572	403 455 1418	CERAMIC	2.2U K	16V
C2573	403 455 1418	CERAMIC	2.2U K	16V
C2574	403 455 1418	CERAMIC	2.2U K	16V
C2576	403 455 1418	CERAMIC	2.2U K	16V
C2577	403 455 1418	CERAMIC	2.2U K	16V
C2578	403 455 1418	CERAMIC	2.2U K	16V
C2579	403 455 1418	CERAMIC	2.2U K	16V
C2581	403 455 1418	CERAMIC	2.2U K	16V
C2582	403 455 1418	CERAMIC	2.2U K	16V
C2583	403 455 1418	CERAMIC	2.2U K	16V
C2801	303 409 3426	CERAMIC	0.1U K	16V
C2811	303 409 3426	CERAMIC	0.1U K	16V
C2851	303 409 3426	CERAMIC	0.1U K	16V
C2852	303 409 3426	CERAMIC	0.1U K	16V
C2853	303 409 3426	CERAMIC	0.1U K	16V
C2854	303 409 3426	CERAMIC	0.1U K	16V
C2856	303 409 3426	CERAMIC	0.1U K	16V
C2857	303 433 1112	CERAMIC	1U K	10V
C301	303 409 3426	CERAMIC	0.1U K	16V
C302	303 409 3426	CERAMIC	0.1U K	16V
C303	303 433 1112	CERAMIC	1U K	10V
C304	303 409 3426	CERAMIC	0.1U K	16V
C305	303 433 1112	CERAMIC	1U K	10V
C306	303 409 3426	CERAMIC	0.1U K	16V
C307	303 433 1112	CERAMIC	1U K	10V
C308	303 409 3426	CERAMIC	0.1U K	16V
C309	303 409 3426	CERAMIC	0.1U K	16V
C311	303 409 3426	CERAMIC	0.1U K	16V
C312	303 409 3426	CERAMIC	0.1U K	16V
C313	303 409 3426	CERAMIC	0.1U K	16V
C316	303 409 3426	CERAMIC	0.1U K	16V
C318	303 409 3426	CERAMIC	0.1U K	16V
C319	303 409 3426	CERAMIC	0.1U K	16V
C321	303 409 3426	CERAMIC	0.1U K	16V
C322	303 409 3426	CERAMIC	0.1U K	16V
C323	303 409 3426	CERAMIC	0.1U K	16V
C327	303 433 1112	CERAMIC	1U K	10V
C328	303 433 1112	CERAMIC	1U K	10V
C331	303 409 3426	CERAMIC	0.1U K	16V
C332	303 409 3426	CERAMIC	0.1U K	16V
C333	303 409 3426	CERAMIC	0.1U K	16V
C334	303 409 3426	CERAMIC	0.1U K	16V
C336	303 409 3426	CERAMIC	0.1U K	16V
C337	303 409 3426	CERAMIC	0.1U K	16V
C338	303 409 3426	CERAMIC	0.1U K	16V
C339	303 409 3426	CERAMIC	0.1U K	16V
C3401	303 409 3426	CERAMIC	0.1U K	16V
C3402	303 409 3426	CERAMIC	0.1U K	16V
C3403	303 409 3426	CERAMIC	0.1U K	16V
C3404	303 409 3426	CERAMIC	0.1U K	16V
C3405	303 409 3426	CERAMIC	0.1U K	16V
C3406	303 409 3426	CERAMIC	0.1U K	16V
C341	303 409 3426	CERAMIC	0.1U K	16V
C342	303 409 3426	CERAMIC	0.1U K	16V
C343	303 433 1112	CERAMIC	1U K	10V
C344	303 433 1112	CERAMIC	1U K	10V
C346	303 409 3426	CERAMIC	0.1U K	16V
C347	303 409 3426	CERAMIC	0.1U K	16V
C3471	303 409 3426	CERAMIC	0.1U K	16V
C3472	303 409 3426	CERAMIC	0.1U K	16V
C348	303 409 3426	CERAMIC	0.1U K	16V
C349	303 409 3426	CERAMIC	0.1U K	16V
C3501	303 391 5412	ELECT	22U M	6.3V
C3502	303 409 3426	CERAMIC	0.1U K	16V
C3503	303 409 3426	CERAMIC	0.1U K	16V
C3504	303 397 6611	ELECT	10U M	25V
	303 387 6812	ELECT	10U M	25V
C3506	303 342 3313	CERAMIC	0.1U K	25V
C3507	303 342 3313	CERAMIC	0.1U K	25V
C3508	303 398 5118	ELECT	33U M	25V
	303 387 7116	ELECT	33U M	25V
C351	303 409 3426	CERAMIC	0.1U K	16V
C352	303 409 3426	CERAMIC	0.1U K	16V
C353	303 409 3426	CERAMIC	0.1U K	16V
C3531	303 391 5412	ELECT	22U M	6.3V
C3532	303 409 3426	CERAMIC	0.1U K	16V
C3533	303 409 3426	CERAMIC	0.1U K	16V
C3534	303 397 6611	ELECT	10U M	25V
	303 387 6812	ELECT	10U M	25V
C3536	303 342 3313	CERAMIC	0.1U K	25V
C3537	303 342 3313	CERAMIC	0.1U K	25V
C3538	303 398 5118	ELECT	33U M	25V
	303 387 7116	ELECT	33U M	25V
C356	303 409 3426	CERAMIC	0.1U K	16V
C3561	303 391 5412	ELECT	22U M	6.3V
C3562	303 409 3426	CERAMIC	0.1U K	16V
C3563	303 409 3426	CERAMIC	0.1U K	16V
C3564	303 397 6611	ELECT	10U M	25V
	303 387 6812	ELECT	10U M	25V
C3566	303 342 3313	CERAMIC	0.1U K	25V
C3567	303 342 3313	CERAMIC	0.1U K	25V
C3568	303 398 5118	ELECT	33U M	25V
	303 387 7116	ELECT	33U M	25V
C357	303 409 3426	CERAMIC	0.1U K	16V
C358	303 409 3426	CERAMIC	0.1U K	16V
C359	303 409 3426	CERAMIC	0.1U K	16V
C361	303 409 3426	CERAMIC	0.1U K	16V
C362	303 409 3426	CERAMIC	0.1U K	16V
C363	303 409 3426	CERAMIC	0.1U K	16V
C364	303 409 3426	CERAMIC	0.1U K	16V
C366	303 409 3426	CERAMIC	0.1U K	16V
C367	303 409 3426	CERAMIC	0.1U K	16V
C368	303 409 3426	CERAMIC	0.1U K	16V
C369	303 409 3426	CERAMIC	0.1U K	16V
C371	303 409 3426	CERAMIC	0.1U K	16V
C372	303 409 3426	CERAMIC	0.1U K	16V
C373	303 433 1112	CERAMIC	1U K	10V
C374	303 409 3426	CERAMIC	0.1U K	16V
C375	303 409 3426	CERAMIC	0.1U K	16V
C376	303 409 3426	CERAMIC	0.1U K	16V
C377	303 433 1112	CERAMIC	1U K	10V
C378	303 409 3426	CERAMIC	0.1U K	16V
C379	303 409 3426	CERAMIC	0.1U K	16V
C3801	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C3802	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C3803	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C3804	303 396 9514	CERAMIC	2.2U K	10V

Electrical Parts List

Key No.	Part No.	Description		
	303 382 7814	CERAMIC	2.2U K	10V
C3806	303 433 1112	CERAMIC	1U K	10V
C381	303 433 1112	CERAMIC	1U K	10V
C382	303 409 3426	CERAMIC	0.1U K	16V
C383	303 409 3426	CERAMIC	0.1U K	16V
C384	303 409 3426	CERAMIC	0.1U K	16V
C385	303 409 3426	CERAMIC	0.1U K	16V
C386	303 433 1112	CERAMIC	1U K	10V
C387	303 409 3426	CERAMIC	0.1U K	16V
C388	303 409 3426	CERAMIC	0.1U K	16V
C389	303 409 3426	CERAMIC	0.1U K	16V
C391	303 409 3426	CERAMIC	0.1U K	16V
C392	303 409 3426	CERAMIC	0.1U K	16V
C393	303 409 3426	CERAMIC	0.1U K	16V
C394	303 433 1112	CERAMIC	1U K	10V
C395	303 409 3426	CERAMIC	0.1U K	16V
C396	303 409 3426	CERAMIC	0.1U K	16V
C397	303 409 3426	CERAMIC	0.1U K	16V
C398	303 409 3426	CERAMIC	0.1U K	16V
C399	303 409 3426	CERAMIC	0.1U K	16V
C407	303 409 3426	CERAMIC	0.1U K	16V
C409	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C411	303 433 1112	CERAMIC	1U K	10V
C412	303 369 0527	CERAMIC	0.01U K	25V
C4402	303 409 3426	CERAMIC	0.1U K	16V
C4403	303 409 3426	CERAMIC	0.1U K	16V
C4404	303 409 3426	CERAMIC	0.1U K	16V
C4406	303 409 3426	CERAMIC	0.1U K	16V
C4407	303 409 3426	CERAMIC	0.1U K	16V
C4408	303 409 3426	CERAMIC	0.1U K	16V
C4409	303 409 3426	CERAMIC	0.1U K	16V
C4411	303 409 3426	CERAMIC	0.1U K	16V
C4412	303 409 3426	CERAMIC	0.1U K	16V
C4413	303 409 3426	CERAMIC	0.1U K	16V
C4414	303 409 3426	CERAMIC	0.1U K	16V
C4415	303 409 3426	CERAMIC	0.1U K	16V
C4416	303 409 3426	CERAMIC	0.1U K	16V
C4417	303 409 3426	CERAMIC	0.1U K	16V
C4418	303 409 3426	CERAMIC	0.1U K	16V
C4419	303 409 3426	CERAMIC	0.1U K	16V
C4420	303 409 3426	CERAMIC	0.1U K	16V
C4421	303 409 3426	CERAMIC	0.1U K	16V
C4422	303 409 3426	CERAMIC	0.1U K	16V
C4423	303 409 3426	CERAMIC	0.1U K	16V
C4424	303 409 3426	CERAMIC	0.1U K	16V
C4426	303 409 3426	CERAMIC	0.1U K	16V
C4427	303 409 3426	CERAMIC	0.1U K	16V
C4428	303 409 3426	CERAMIC	0.1U K	16V
C4429	303 409 3426	CERAMIC	0.1U K	16V
C4431	303 409 3426	CERAMIC	0.1U K	16V
C4432	303 409 3426	CERAMIC	0.1U K	16V
C4433	303 409 3426	CERAMIC	0.1U K	16V
C4434	303 409 3426	CERAMIC	0.1U K	16V
C4436	303 409 3426	CERAMIC	0.1U K	16V
C4437	303 409 3426	CERAMIC	0.1U K	16V
C4438	303 409 3426	CERAMIC	0.1U K	16V
C4439	303 409 3426	CERAMIC	0.1U K	16V
C4441	303 409 3426	CERAMIC	0.1U K	16V
C4442	303 409 3426	CERAMIC	0.1U K	16V
C4443	303 409 3426	CERAMIC	0.1U K	16V
C4444	303 409 3426	CERAMIC	0.1U K	16V
C4446	303 433 1112	CERAMIC	1U K	10V
C4447	303 433 1112	CERAMIC	1U K	10V
C4448	303 433 1112	CERAMIC	1U K	10V
C4449	303 433 1112	CERAMIC	1U K	10V
C4451	303 433 1112	CERAMIC	1U K	10V
C4452	303 433 1112	CERAMIC	1U K	10V
C4453	303 433 1112	CERAMIC	1U K	10V
C4454	303 433 1112	CERAMIC	1U K	10V
C4456	303 433 1112	CERAMIC	1U K	10V
C4457	303 433 1112	CERAMIC	1U K	10V
C4458	303 433 1112	CERAMIC	1U K	10V
C4459	303 433 1112	CERAMIC	1U K	10V
C4461	303 433 1112	CERAMIC	1U K	10V
C4462	303 433 1112	CERAMIC	1U K	10V
C4463	303 433 1112	CERAMIC	1U K	10V
C4464	303 433 1112	CERAMIC	1U K	10V
C4466	303 433 1112	CERAMIC	1U K	10V
C4467	303 433 1112	CERAMIC	1U K	10V
C4468	303 433 1112	CERAMIC	1U K	10V
C4469	303 433 1112	CERAMIC	1U K	10V
C4471	303 433 1112	CERAMIC	1U K	10V
C4499	303 409 3426	CERAMIC	0.1U K	16V
C4501	303 409 3426	CERAMIC	0.1U K	16V
C451	303 409 3426	CERAMIC	0.1U K	16V
C452	303 409 3426	CERAMIC	0.1U K	16V
C453	303 409 3426	CERAMIC	0.1U K	16V
C454	303 409 3426	CERAMIC	0.1U K	16V
C455	303 409 3426	CERAMIC	0.1U K	16V
C456	303 409 3426	CERAMIC	0.1U K	16V
C457	303 409 3426	CERAMIC	0.1U K	16V
C458	303 409 3426	CERAMIC	0.1U K	16V
C459	303 409 3426	CERAMIC	0.1U K	16V
C4601	303 407 1018	CERAMIC	4.7U K	6.3V
	303 383 5215	CERAMIC	4.7U K	6.3V
C4602	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C4603	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C4604	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
	403 458 7615	ELECT	100U M	16V
C4606	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
	403 458 6618	ELECT	47U M	25V
C4607	303 374 8416	OS-SOLID	39U M	16V
C4608	303 374 8416	OS-SOLID	39U M	16V
C4609	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
	403 458 7615	ELECT	100U M	16V
C461	303 409 3426	CERAMIC	0.1U K	16V
C4611	303 374 8416	OS-SOLID	39U M	16V
C4612	303 407 1018	CERAMIC	4.7U K	6.3V
	303 383 5215	CERAMIC	4.7U K	6.3V
C4613	303 407 1018	CERAMIC	4.7U K	6.3V
	303 383 5215	CERAMIC	4.7U K	6.3V
C4614	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
	403 458 6618	ELECT	47U M	25V
C4616	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
	403 458 6618	ELECT	47U M	25V
C4617	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
	403 458 6618	ELECT	47U M	25V
C462	303 409 3426	CERAMIC	0.1U K	16V
C4621	303 441 9810	CERAMIC	0.01U K	50V
C463	303 409 3426	CERAMIC	0.1U K	16V
C4637	303 407 1018	CERAMIC	4.7U K	6.3V
	303 383 5215	CERAMIC	4.7U K	6.3V
C4638	403 456 4210	CERAMIC	470P J	50V

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Key No.	Part No.	Description		
C464	303 409 3426	CERAMIC	0.1U K	16V
C4641	303 441 9810	CERAMIC	0.01U K	50V
C4642	303 441 9810	CERAMIC	0.01U K	50V
C4643	303 441 9810	CERAMIC	0.01U K	50V
C4644	303 441 9810	CERAMIC	0.01U K	50V
C4646	303 441 9810	CERAMIC	0.01U K	50V
C4651	303 441 9810	CERAMIC	0.01U K	50V
C4652	303 441 9810	CERAMIC	0.01U K	50V
C466	303 409 3426	CERAMIC	0.1U K	16V
C467	303 409 3426	CERAMIC	0.1U K	16V
C468	303 409 3426	CERAMIC	0.1U K	16V
C469	303 409 3426	CERAMIC	0.1U K	16V
C471	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C472	303 409 3426	CERAMIC	0.1U K	16V
C473	303 409 3426	CERAMIC	0.1U K	16V
C474	303 409 3426	CERAMIC	0.1U K	16V
C478	303 409 3426	CERAMIC	0.1U K	16V
C479	303 409 3426	CERAMIC	0.1U K	16V
C4801	303 409 3426	CERAMIC	0.1U K	16V
C4802	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C4806	303 409 3426	CERAMIC	0.1U K	16V
C481	303 409 3426	CERAMIC	0.1U K	16V
C482	303 409 3426	CERAMIC	0.1U K	16V
C483	303 409 3426	CERAMIC	0.1U K	16V
C484	303 409 3426	CERAMIC	0.1U K	16V
C486	303 409 3426	CERAMIC	0.1U K	16V
C487	303 409 3426	CERAMIC	0.1U K	16V
C488	303 409 3426	CERAMIC	0.1U K	16V
C489	303 409 3426	CERAMIC	0.1U K	16V
C4891	303 433 1112	CERAMIC	1U K	10V
C4892	303 409 3426	CERAMIC	0.1U K	16V
C4893	303 433 1112	CERAMIC	1U K	10V
C501	303 409 3426	CERAMIC	0.1U K	16V
C502	303 409 3426	CERAMIC	0.1U K	16V
C503	303 409 3426	CERAMIC	0.1U K	16V
C504	303 409 3426	CERAMIC	0.1U K	16V
C506	303 409 3426	CERAMIC	0.1U K	16V
C507	303 409 3426	CERAMIC	0.1U K	16V
C508	303 409 3426	CERAMIC	0.1U K	16V
C509	303 409 3426	CERAMIC	0.1U K	16V
C5101	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5102	303 409 3426	CERAMIC	0.1U K	16V
C5103	303 398 4111	ELECT	47U M	16V
	303 387 6515	ELECT	47U M	16V
C511	303 409 3426	CERAMIC	0.1U K	16V
C5111	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5112	303 409 3426	CERAMIC	0.1U K	16V
C5113	303 433 1112	CERAMIC	1U K	10V
C512	303 409 3426	CERAMIC	0.1U K	16V
C5121	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C5122	303 391 5115	ELECT	100U M	16V
	303 427 8417	ELECT	100U M	16V
	303 296 9515	ELECT	100U M	16V
C5123	303 376 6311	CERAMIC	0.47U K	10V
C5124	303 441 9810	CERAMIC	0.01U K	50V
C5126	303 433 1112	CERAMIC	1U K	10V
C5128	303 433 1112	CERAMIC	1U K	10V
C5129	303 391 5115	ELECT	100U M	16V
	303 427 8417	ELECT	100U M	16V
	303 296 9515	ELECT	100U M	16V
C513	303 409 3426	CERAMIC	0.1U K	16V
C514	303 409 3426	CERAMIC	0.1U K	16V

Key No.	Part No.	Description		
C5141	303 441 9810	CERAMIC	0.01U K	50V
C5151	303 441 9810	CERAMIC	0.01U K	50V
C516	303 409 3426	CERAMIC	0.1U K	16V
C518	303 409 3426	CERAMIC	0.1U K	16V
C519	303 409 3426	CERAMIC	0.1U K	16V
C5201	303 381 9918	ELECT	470U M	16V
	303 407 3517	ELECT	470U M	16V
	403 458 5017	ELECT	470U M	16V
C5203	303 381 9918	ELECT	470U M	16V
	303 407 3517	ELECT	470U M	16V
	403 458 5017	ELECT	470U M	16V
C5206	303 381 9918	ELECT	470U M	16V
	303 407 3517	ELECT	470U M	16V
	403 458 5017	ELECT	470U M	16V
C521	303 409 3426	CERAMIC	0.1U K	16V
C5211	303 409 3426	CERAMIC	0.1U K	16V
C5213	303 409 3426	CERAMIC	0.1U K	16V
C5216	303 409 3426	CERAMIC	0.1U K	16V
C522	303 409 3426	CERAMIC	0.1U K	16V
C5221	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C5222	303 433 1112	CERAMIC	1U K	10V
C5223	303 433 1112	CERAMIC	1U K	10V
C5224	303 276 1317	CERAMIC	1000P K	50V
C5226	303 409 3426	CERAMIC	0.1U K	16V
C5227	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C5228	303 409 3426	CERAMIC	0.1U K	16V
C5229	303 409 3426	CERAMIC	0.1U K	16V
C523	303 409 3426	CERAMIC	0.1U K	16V
C524	303 409 3426	CERAMIC	0.1U K	16V
C5244	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C5261	303 433 1112	CERAMIC	1U K	10V
C5262	303 433 1112	CERAMIC	1U K	10V
C5263	303 433 1112	CERAMIC	1U K	10V
C5291	303 433 1112	CERAMIC	1U K	10V
C5292	303 433 1112	CERAMIC	1U K	10V
C5293	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C5301	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C5303	303 409 3426	CERAMIC	0.1U K	16V
C5304	303 409 3426	CERAMIC	0.1U K	16V
C5307	303 276 2116	CERAMIC	3P C	50V
C5308	303 284 4317	CERAMIC	0.022U K	50V
C5309	303 409 3426	CERAMIC	0.1U K	16V
C531	303 409 3426	CERAMIC	0.1U K	16V
C5311	303 433 1112	CERAMIC	1U K	10V
C5313	303 409 3426	CERAMIC	0.1U K	16V
C532	303 409 3426	CERAMIC	0.1U K	16V
C5321	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C5322	303 376 6311	CERAMIC	0.47U K	10V
C5323	303 376 6311	CERAMIC	0.47U K	10V
C5324	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C5326	303 409 3426	CERAMIC	0.1U K	16V
C5327	303 433 1112	CERAMIC	1U K	10V
C5328	303 396 9514	CERAMIC	2.2U K	10V
	303 382 7814	CERAMIC	2.2U K	10V
C5329	303 433 1112	CERAMIC	1U K	10V
C533	303 409 3426	CERAMIC	0.1U K	16V
C5331	303 294 6110	CERAMIC	100P J	50V

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Key No.	Part No.	Description		
C5332	303 409 3426	CERAMIC	0.1U K	16V
C5333	303 376 6311	CERAMIC	0.47U K	10V
C5334	303 320 0419	CERAMIC	68P J	50V
C5336	303 309 2519	CERAMIC	27P J	50V
C5337	303 294 6110	CERAMIC	100P J	50V
C5338	303 433 1112	CERAMIC	1U K	10V
C534	303 409 3426	CERAMIC	0.1U K	16V
C5341	303 409 3426	CERAMIC	0.1U K	16V
C5342	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C5351	303 409 3426	CERAMIC	0.1U K	16V
C536	303 409 3426	CERAMIC	0.1U K	16V
C5361	303 409 3426	CERAMIC	0.1U K	16V
C537	303 409 3426	CERAMIC	0.1U K	16V
C538	303 409 3426	CERAMIC	0.1U K	16V
C539	303 409 3426	CERAMIC	0.1U K	16V
C541	303 409 3426	CERAMIC	0.1U K	16V
C542	303 409 3426	CERAMIC	0.1U K	16V
C543	303 409 3426	CERAMIC	0.1U K	16V
C544	303 409 3426	CERAMIC	0.1U K	16V
C546	303 409 3426	CERAMIC	0.1U K	16V
C548	303 409 3426	CERAMIC	0.1U K	16V
C549	303 409 3426	CERAMIC	0.1U K	16V
C5501	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5502	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5503	303 409 3426	CERAMIC	0.1U K	16V
C5504	303 409 3426	CERAMIC	0.1U K	16V
C5506	303 409 3426	CERAMIC	0.1U K	16V
C551	303 409 3426	CERAMIC	0.1U K	16V
C552	303 409 3426	CERAMIC	0.1U K	16V
C553	303 409 3426	CERAMIC	0.1U K	16V
C554	303 409 3426	CERAMIC	0.1U K	16V
C5551	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5552	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5563	303 409 3426	CERAMIC	0.1U K	16V
C5564	303 409 3426	CERAMIC	0.1U K	16V
C5566	303 409 3426	CERAMIC	0.1U K	16V
C5609	303 433 1112	CERAMIC	1U K	10V
C561	303 409 3426	CERAMIC	0.1U K	16V
C5611	303 409 3426	CERAMIC	0.1U K	16V
C5612	303 409 3426	CERAMIC	0.1U K	16V
C5613	303 409 3426	CERAMIC	0.1U K	16V
C5614	303 379 7315	CERAMIC	4700P K	50V
C5616	303 433 1112	CERAMIC	1U K	10V
C5617	303 306 6510	CERAMIC	8200P K	50V
C5618	303 409 3426	CERAMIC	0.1U K	16V
C5619	303 363 8519	POS-SOLID	470U M	6.3V
C562	303 409 3426	CERAMIC	0.1U K	16V
C5621	303 433 1112	CERAMIC	1U K	10V
C5622	303 409 3426	CERAMIC	0.1U K	16V
C5623	303 433 1112	CERAMIC	1U K	10V
C5627	303 409 3426	CERAMIC	0.1U K	16V
C5628	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C563	303 409 3426	CERAMIC	0.1U K	16V
C5631	303 433 1112	CERAMIC	1U K	10V
C5632	303 409 3426	CERAMIC	0.1U K	16V
C5633	303 433 1112	CERAMIC	1U K	10V
C5636	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C5637	303 409 3426	CERAMIC	0.1U K	16V
C564	303 409 3426	CERAMIC	0.1U K	16V
C5641	303 433 1112	CERAMIC	1U K	10V
C5642	303 363 8519	POS-SOLID	470U M	6.3V
C5643	303 409 3426	CERAMIC	0.1U K	16V
C5644	303 306 6510	CERAMIC	8200P K	50V
C5646	303 433 1112	CERAMIC	1U K	10V
C5651	303 409 3426	CERAMIC	0.1U K	16V
C5652	303 409 3426	CERAMIC	0.1U K	16V
C5653	303 409 3426	CERAMIC	0.1U K	16V
C5654	303 379 7315	CERAMIC	4700P K	50V
C566	303 409 3426	CERAMIC	0.1U K	16V
C5661	303 433 1112	CERAMIC	1U K	10V
C5662	303 409 3426	CERAMIC	0.1U K	16V
C5663	303 433 1112	CERAMIC	1U K	10V
C5666	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C5667	303 409 3426	CERAMIC	0.1U K	16V
C567	303 409 3426	CERAMIC	0.1U K	16V
C5671	303 409 3426	CERAMIC	0.1U K	16V
C568	303 409 3426	CERAMIC	0.1U K	16V
C5681	303 433 1112	CERAMIC	1U K	10V
C5683	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C5686	303 341 3918	POS-SOLID	100U M	6.3V
C569	303 409 3426	CERAMIC	0.1U K	16V
C5691	303 433 1112	CERAMIC	1U K	10V
C5692	303 409 3426	CERAMIC	0.1U K	16V
C5693	303 433 1112	CERAMIC	1U K	10V
C571	303 409 3426	CERAMIC	0.1U K	16V
C572	303 409 3426	CERAMIC	0.1U K	16V
C573	303 409 3426	CERAMIC	0.1U K	16V
C574	303 409 3426	CERAMIC	0.1U K	16V
C576	303 409 3426	CERAMIC	0.1U K	16V
C578	303 409 3426	CERAMIC	0.1U K	16V
C579	303 409 3426	CERAMIC	0.1U K	16V
C581	303 409 3426	CERAMIC	0.1U K	16V
C582	303 409 3426	CERAMIC	0.1U K	16V
C583	303 409 3426	CERAMIC	0.1U K	16V
C584	303 409 3426	CERAMIC	0.1U K	16V
C5841	303 409 3426	CERAMIC	0.1U K	16V
C5851	303 409 3426	CERAMIC	0.1U K	16V
C6201	303 145 9918	CERAMIC	22P J	50V
C6202	303 145 9918	CERAMIC	22P J	50V
C6203	303 369 0527	CERAMIC	0.01U K	25V
C6204	303 369 0527	CERAMIC	0.01U K	25V
C6205	303 369 0527	CERAMIC	0.01U K	25V
C6206	303 369 0527	CERAMIC	0.01U K	25V
C6207	303 369 0527	CERAMIC	0.01U K	25V
C6208	303 369 0527	CERAMIC	0.01U K	25V
C6209	303 369 0527	CERAMIC	0.01U K	25V
C6211	303 369 0527	CERAMIC	0.01U K	25V
C6212	303 369 0527	CERAMIC	0.01U K	25V
C6213	303 369 0527	CERAMIC	0.01U K	25V
C6214	303 369 0527	CERAMIC	0.01U K	25V
C6216	303 369 0527	CERAMIC	0.01U K	25V
C6217	303 369 0527	CERAMIC	0.01U K	25V
C6218	303 369 0527	CERAMIC	0.01U K	25V
C6219	303 369 0527	CERAMIC	0.01U K	25V
C6221	303 369 0527	CERAMIC	0.01U K	25V
C6222	303 369 0527	CERAMIC	0.01U K	25V
C6223	303 369 0527	CERAMIC	0.01U K	25V
C6224	303 369 0527	CERAMIC	0.01U K	25V
C6226	303 369 0527	CERAMIC	0.01U K	25V
C6231	303 409 3426	CERAMIC	0.1U K	16V
C6232	303 409 3426	CERAMIC	0.1U K	16V

Electrical Parts List

Key No.	Part No.	Description		
C6233	303 409 3426	CERAMIC	0.1U K	16V
C6234	303 409 3426	CERAMIC	0.1U K	16V
C6236	303 409 3426	CERAMIC	0.1U K	16V
C6237	303 409 3426	CERAMIC	0.1U K	16V
C6238	303 409 3426	CERAMIC	0.1U K	16V
C6239	303 409 3426	CERAMIC	0.1U K	16V
C6241	303 409 3426	CERAMIC	0.1U K	16V
C6242	303 409 3426	CERAMIC	0.1U K	16V
C6243	303 409 3426	CERAMIC	0.1U K	16V
C6244	303 409 3426	CERAMIC	0.1U K	16V
C6246	303 409 3426	CERAMIC	0.1U K	16V
C6247	303 409 3426	CERAMIC	0.1U K	16V
C6248	303 409 3426	CERAMIC	0.1U K	16V
C6249	303 409 3426	CERAMIC	0.1U K	16V
C6261	303 433 1112	CERAMIC	1U K	10V
C6262	303 409 3426	CERAMIC	0.1U K	16V
C6263	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C6266	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C6267	303 409 3426	CERAMIC	0.1U K	16V
C6268	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C6269	303 409 3426	CERAMIC	0.1U K	16V
C6271	303 433 1112	CERAMIC	1U K	10V
C6272	303 409 3426	CERAMIC	0.1U K	16V
C6273	303 433 1112	CERAMIC	1U K	10V
C6276	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C6277	303 409 3426	CERAMIC	0.1U K	16V
C6281	303 433 1112	CERAMIC	1U K	10V
C6282	303 409 3426	CERAMIC	0.1U K	16V
C6283	303 433 1112	CERAMIC	1U K	10V
C6286	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C6287	303 409 3426	CERAMIC	0.1U K	16V
C6501	303 409 3426	CERAMIC	0.1U K	16V
C6531	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C6532	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C6533	303 409 3426	CERAMIC	0.1U K	16V
C6534	303 409 3426	CERAMIC	0.1U K	16V
C6536	303 409 3426	CERAMIC	0.1U K	16V
C6541	303 409 3426	CERAMIC	0.1U K	16V
C6551	303 409 3426	CERAMIC	0.1U K	16V
C6561	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C6562	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C6563	303 409 3426	CERAMIC	0.1U K	16V
C6564	303 409 3426	CERAMIC	0.1U K	16V
C6566	303 409 3426	CERAMIC	0.1U K	16V
C6671	303 433 1112	CERAMIC	1U K	10V
C6672	303 363 8519	POS-SOLID	470U M	6.3V
C6673	303 409 3426	CERAMIC	0.1U K	16V
C6674	303 306 6510	CERAMIC	8200P K	50V
C6676	303 433 1112	CERAMIC	1U K	10V
C6677	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C6678	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C6681	303 409 3426	CERAMIC	0.1U K	16V
C6682	303 409 3426	CERAMIC	0.1U K	16V
C6683	303 379 7315	CERAMIC	4700P K	50V
C6684	303 409 3426	CERAMIC	0.1U K	16V
C6691	303 433 1112	CERAMIC	1U K	10V
C6692	303 433 1112	CERAMIC	1U K	10V
C6693	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C6801	303 409 3426	CERAMIC	0.1U K	16V
C6802	303 409 3426	CERAMIC	0.1U K	16V
C6803	303 409 3426	CERAMIC	0.1U K	16V
C7201	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C7202	303 409 3426	CERAMIC	0.1U K	16V
C7203	303 409 3426	CERAMIC	0.1U K	16V
C7204	303 409 3426	CERAMIC	0.1U K	16V
C7206	303 409 3426	CERAMIC	0.1U K	16V
C7207	303 409 3426	CERAMIC	0.1U K	16V
C7208	303 409 3426	CERAMIC	0.1U K	16V
C7209	303 409 3426	CERAMIC	0.1U K	16V
C7211	303 409 3426	CERAMIC	0.1U K	16V
C7212	303 409 3426	CERAMIC	0.1U K	16V
C7213	303 409 3426	CERAMIC	0.1U K	16V
C7214	303 409 3426	CERAMIC	0.1U K	16V
C7216	303 409 3426	CERAMIC	0.1U K	16V
C7217	303 409 3426	CERAMIC	0.1U K	16V
C7218	303 409 3426	CERAMIC	0.1U K	16V
C7219	303 409 3426	CERAMIC	0.1U K	16V
C7221	303 409 3426	CERAMIC	0.1U K	16V
C7222	303 409 3426	CERAMIC	0.1U K	16V
C7223	303 409 3426	CERAMIC	0.1U K	16V
C7224	303 409 3426	CERAMIC	0.1U K	16V
C7226	303 409 3426	CERAMIC	0.1U K	16V
C7229	303 409 3426	CERAMIC	0.1U K	16V
C7233	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C7234	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C7262	303 409 3426	CERAMIC	0.1U K	16V
C7281	303 433 1112	CERAMIC	1U K	10V
C7282	303 409 3426	CERAMIC	0.1U K	16V
C7283	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C7291	303 433 1112	CERAMIC	1U K	10V
C7292	303 409 3426	CERAMIC	0.1U K	16V
C7293	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C7601	303 433 1112	CERAMIC	1U K	10V
C7602	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C7603	303 379 0217	POS-SOLID	68U M	6.3V
C7604	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C7611	303 445 0516	CERAMIC	0.33U K	10V
C7612	303 409 3426	CERAMIC	0.1U K	16V
C7613	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C7614	303 397 5713	ELECT	100U M	10V
	303 387 5617	ELECT	100U M	10V
C7621	303 342 3313	CERAMIC	0.1U K	25V
C7622	303 342 3313	CERAMIC	0.1U K	25V
C7623	303 398 5118	ELECT	33U M	25V
	303 387 7116	ELECT	33U M	25V
C7624	303 398 5118	ELECT	33U M	25V
	303 387 7116	ELECT	33U M	25V

Electrical Parts List

Key No.	Part No.	Description		
C7625	303 398 5118	ELECT	33U M	25V
	303 387 7116	ELECT	33U M	25V
C7634	303 397 4211	POS-SOLID	47U M	20V
C7641	303 433 1112	CERAMIC	1U K	10V
C7642	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C7651	303 433 1112	CERAMIC	1U K	10V
C7652	303 433 1112	CERAMIC	1U K	10V
C7661	303 433 1112	CERAMIC	1U K	10V
C7662	303 433 1112	CERAMIC	1U K	10V
C7801	303 409 3426	CERAMIC	0.1U K	16V
C7802	303 409 3426	CERAMIC	0.1U K	16V
C7803	303 409 3426	CERAMIC	0.1U K	16V
C7804	303 409 3426	CERAMIC	0.1U K	16V
C7809	303 407 1018	CERAMIC	4.7U K	6.3V
	303 383 5215	CERAMIC	4.7U K	6.3V
C7811	303 407 1018	CERAMIC	4.7U K	6.3V
	303 383 5215	CERAMIC	4.7U K	6.3V
C7821	303 409 3426	CERAMIC	0.1U K	16V
C8001	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8002	303 409 3426	CERAMIC	0.1U K	16V
C8003	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8004	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C8006	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8007	303 409 3426	CERAMIC	0.1U K	16V
C8008	303 276 1317	CERAMIC	1000P K	50V
C8009	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C801	303 409 3426	CERAMIC	0.1U K	16V
C8011	303 276 1317	CERAMIC	1000P K	50V
C8012	303 276 1317	CERAMIC	1000P K	50V
C8013	303 276 1317	CERAMIC	1000P K	50V
C8014	303 276 1317	CERAMIC	1000P K	50V
C8017	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8021	303 276 1317	CERAMIC	1000P K	50V
C8022	303 409 3426	CERAMIC	0.1U K	16V
C8023	303 276 1317	CERAMIC	1000P K	50V
C8024	303 409 3426	CERAMIC	0.1U K	16V
C8026	303 409 3426	CERAMIC	0.1U K	16V
C8027	303 276 1317	CERAMIC	1000P K	50V
C8028	303 409 3426	CERAMIC	0.1U K	16V
C8029	303 276 1317	CERAMIC	1000P K	50V
C8031	303 409 3426	CERAMIC	0.1U K	16V
C8032	303 276 1317	CERAMIC	1000P K	50V
C8033	303 409 3426	CERAMIC	0.1U K	16V
C8034	303 276 1317	CERAMIC	1000P K	50V
C8036	303 276 1317	CERAMIC	1000P K	50V
C8037	303 409 3426	CERAMIC	0.1U K	16V
C8038	303 409 3426	CERAMIC	0.1U K	16V
C8039	303 276 1317	CERAMIC	1000P K	50V
C8101	303 409 3426	CERAMIC	0.1U K	16V
C8121	303 409 3426	CERAMIC	0.1U K	16V
C8131	303 409 3426	CERAMIC	0.1U K	16V
C8141	303 409 3426	CERAMIC	0.1U K	16V
C8161	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C8162	303 394 1312	ELECT	100U M	6.3V
	303 427 9315	ELECT	100U M	6.3V
	303 387 4917	ELECT	100U M	6.3V
C8201	303 409 3426	CERAMIC	0.1U K	16V
C8202	303 424 7017	CERAMIC	0.047U K	25V
C8203	303 424 7017	CERAMIC	0.047U K	25V
C8204	303 424 7017	CERAMIC	0.047U K	25V
C8206	303 424 7017	CERAMIC	0.047U K	25V
C8207	303 409 3426	CERAMIC	0.1U K	16V
C8208	303 409 3426	CERAMIC	0.1U K	16V
C8209	303 409 3426	CERAMIC	0.1U K	16V
C8231	303 409 3426	CERAMIC	0.1U K	16V
C8232	303 409 3426	CERAMIC	0.1U K	16V
C8233	303 409 3426	CERAMIC	0.1U K	16V
C8234	303 409 3426	CERAMIC	0.1U K	16V
C8236	303 409 3426	CERAMIC	0.1U K	16V
C8237	303 409 3426	CERAMIC	0.1U K	16V
C8239	303 409 3426	CERAMIC	0.1U K	16V
C8241	303 409 3426	CERAMIC	0.1U K	16V
C8242	303 409 3426	CERAMIC	0.1U K	16V
C8243	303 409 3426	CERAMIC	0.1U K	16V
C8244	303 409 3426	CERAMIC	0.1U K	16V
C8261	303 409 3426	CERAMIC	0.1U K	16V
C8262	303 409 3426	CERAMIC	0.1U K	16V
C8263	303 409 3426	CERAMIC	0.1U K	16V
C8264	303 409 3426	CERAMIC	0.1U K	16V
C8266	303 424 7017	CERAMIC	0.047U K	25V
C8267	303 424 7017	CERAMIC	0.047U K	25V
C8268	303 409 3426	CERAMIC	0.1U K	16V
C8269	303 424 7017	CERAMIC	0.047U K	25V
C8271	303 409 3426	CERAMIC	0.1U K	16V
C8272	303 409 3426	CERAMIC	0.1U K	16V
C8273	303 409 3426	CERAMIC	0.1U K	16V
C8274	303 409 3426	CERAMIC	0.1U K	16V
C8291	303 433 1112	CERAMIC	1U K	10V
C8292	303 409 3426	CERAMIC	0.1U K	16V
C8293	303 409 3426	CERAMIC	0.1U K	16V
C8294	303 409 3426	CERAMIC	0.1U K	16V
C8295	303 409 3426	CERAMIC	0.1U K	16V
C8296	303 433 1112	CERAMIC	1U K	10V
C861	303 409 3426	CERAMIC	0.1U K	16V
C862	303 433 1112	CERAMIC	1U K	10V
C8701	303 397 8219	CERAMIC	2.2U K	25V
C8702	303 397 8219	CERAMIC	2.2U K	25V
C8703	303 342 3313	CERAMIC	0.1U K	25V
C8704	303 417 9912	CERAMIC	4.7U K	25V
C8706	303 342 3313	CERAMIC	0.1U K	25V
C8707	303 342 3313	CERAMIC	0.1U K	25V
C8708	303 342 3313	CERAMIC	0.1U K	25V
C8709	303 417 9912	CERAMIC	4.7U K	25V
C8711	303 342 3313	CERAMIC	0.1U K	25V
C8712	303 342 3313	CERAMIC	0.1U K	25V
C8717	303 417 9912	CERAMIC	4.7U K	25V
C8718	303 342 3313	CERAMIC	0.1U K	25V
C8719	303 342 3313	CERAMIC	0.1U K	25V
C8801	303 433 1112	CERAMIC	1U K	10V
C8802	303 409 3426	CERAMIC	0.1U K	16V
C8803	303 433 1112	CERAMIC	1U K	10V
C8821	303 409 3426	CERAMIC	0.1U K	16V
C8831	303 409 3426	CERAMIC	0.1U K	16V
C8841	303 409 3426	CERAMIC	0.1U K	16V
C9718	303 397 8219	CERAMIC	2.2U K	25V
C9719	303 397 8219	CERAMIC	2.2U K	25V
C9721	303 397 8219	CERAMIC	2.2U K	25V
C9722	403 455 1418	CERAMIC	2.2U K	16V
C9723	403 455 1418	CERAMIC	2.2U K	16V
C9724	403 455 1418	CERAMIC	2.2U K	16V
C9726	403 455 1418	CERAMIC	2.2U K	16V
RESISTOR				
R1001	301 225 8110	MT-GLAZE	10 JA	1/16W
R1002	301 226 1516	MT-GLAZE	0.000 ZA	1/16W

Electrical Parts List

Key No.	Part No.	Description		
R1003	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1004	301 238 4512	MT-GLAZE	47 JA	1/3W
R1006	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1007	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1008	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1009	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1011	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1012	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1013	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1014	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1017	301 224 9316	MT-GLAZE	1K JA	1/16W
R1018	301 294 3214	MT-GLAZE	47K FA	1/16W
R1019	301 224 9514	MT-GLAZE	2.2K JA	1/16W
R1033	301 260 4115	MT-GLAZE	75 JA	1/3W
R1034	301 260 4115	MT-GLAZE	75 JA	1/3W
R1036	301 260 4115	MT-GLAZE	75 JA	1/3W
R1051	301 260 4115	MT-GLAZE	75 JA	1/3W
R1052	301 260 4115	MT-GLAZE	75 JA	1/3W
R1053	301 260 4115	MT-GLAZE	75 JA	1/3W
R1061	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1062	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1063	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1064	301 224 9019	MT-GLAZE	10K JA	1/16W
R1066	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1067	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1068	301 224 9019	MT-GLAZE	10K JA	1/16W
R1081	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R1082	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R1301	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1306	301 224 9316	MT-GLAZE	1K JA	1/16W
R1307	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1308	301 225 8110	MT-GLAZE	10 JA	1/16W
R1311	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R1312	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R1321	301 338 1015	MT-GLAZE	49.9 DA	1/16W
R1322	301 338 1015	MT-GLAZE	49.9 DA	1/16W
R1343	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1347	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1348	301 224 9019	MT-GLAZE	10K JA	1/16W
R1349	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1351	301 224 9415	MT-GLAZE	1M JA	1/16W
R1361	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R1362	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1363	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R1364	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1366	301 224 9019	MT-GLAZE	10K JA	1/16W
R1367	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1368	301 224 9019	MT-GLAZE	10K JA	1/16W
R1369	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1372	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1373	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1374	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1376	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1377	301 224 9019	MT-GLAZE	10K JA	1/16W
R1391	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1392	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1401	301 224 9316	MT-GLAZE	1K JA	1/16W
R1402	301 224 9316	MT-GLAZE	1K JA	1/16W
R1408	301 224 9316	MT-GLAZE	1K JA	1/16W
R1411	301 224 9712	MT-GLAZE	22 JA	1/16W
R1412	301 224 9712	MT-GLAZE	22 JA	1/16W
R1413	301 224 9712	MT-GLAZE	22 JA	1/16W
R1414	301 224 9712	MT-GLAZE	22 JA	1/16W
R1416	301 224 9712	MT-GLAZE	22 JA	1/16W
R1417	301 224 9712	MT-GLAZE	22 JA	1/16W
R1431	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1432	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1434	301 224 9019	MT-GLAZE	10K JA	1/16W
R1502	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1504	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1507	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1532	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1533	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1537	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1561	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1564	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1567	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1801	301 224 9415	MT-GLAZE	1M JA	1/16W
R1802	301 237 2915	MT-GLAZE	51 JA	1/16W
R1804	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1806	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1807	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1808	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1809	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1811	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1812	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1813	301 224 9019	MT-GLAZE	10K JA	1/16W
R1814	301 224 9217	MT-GLAZE	15K JA	1/16W
R1816	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1817	301 224 9019	MT-GLAZE	10K JA	1/16W
R1818	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1819	301 224 9019	MT-GLAZE	10K JA	1/16W
R1821	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1822	301 225 8110	MT-GLAZE	10 JA	1/16W
R1823	301 225 8110	MT-GLAZE	10 JA	1/16W
R1824	301 225 8110	MT-GLAZE	10 JA	1/16W
R1826	301 225 8110	MT-GLAZE	10 JA	1/16W
R1827	301 225 8110	MT-GLAZE	10 JA	1/16W
R1828	301 225 8110	MT-GLAZE	10 JA	1/16W
R1829	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1831	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1832	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1833	301 224 9019	MT-GLAZE	10K JA	1/16W
R1834	301 224 9217	MT-GLAZE	15K JA	1/16W
R1836	301 224 9019	MT-GLAZE	10K JA	1/16W
R1837	301 224 9217	MT-GLAZE	15K JA	1/16W
R1838	301 224 9019	MT-GLAZE	10K JA	1/16W
R1839	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1841	301 224 9019	MT-GLAZE	10K JA	1/16W
R1842	301 224 9019	MT-GLAZE	10K JA	1/16W
R1843	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R1844	301 224 9019	MT-GLAZE	10K JA	1/16W
R1845	301 225 8110	MT-GLAZE	10 JA	1/16W
R1848	301 224 9019	MT-GLAZE	10K JA	1/16W
R1849	301 224 9019	MT-GLAZE	10K JA	1/16W
R1851	301 224 9019	MT-GLAZE	10K JA	1/16W
R1852	301 224 9019	MT-GLAZE	10K JA	1/16W
R1853	301 224 9019	MT-GLAZE	10K JA	1/16W
R1854	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1856	301 224 8814	MT-GLAZE	100 JA	1/16W
R1857	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1858	301 226 5415	MT-GLAZE	56 JA	1/16W
R1859	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1862	301 224 9019	MT-GLAZE	10K JA	1/16W
R1863	401 344 1914	MT-GLAZE	10K DA	1/16W
R1864	401 344 1914	MT-GLAZE	10K DA	1/16W
R1866	301 312 6913	MT-GLAZE	160 JA	1/16W
R1867	301 224 9316	MT-GLAZE	1K JA	1/16W
R1881	301 224 9019	MT-GLAZE	10K JA	1/16W
R1882	301 224 9415	MT-GLAZE	1M JA	1/16W
R1883	301 224 9415	MT-GLAZE	1M JA	1/16W
R1884	301 224 9415	MT-GLAZE	1M JA	1/16W
R1885	301 224 9415	MT-GLAZE	1M JA	1/16W
R1886	301 224 9415	MT-GLAZE	1M JA	1/16W

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
R1892	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3404	301 224 9019	MT-GLAZE	10K JA	1/16W
R1893	301 225 8110	MT-GLAZE	10 JA	1/16W	R3406	301 224 9019	MT-GLAZE	10K JA	1/16W
R1894	301 225 8110	MT-GLAZE	10 JA	1/16W	R3407	301 224 9019	MT-GLAZE	10K JA	1/16W
R1896	301 225 8110	MT-GLAZE	10 JA	1/16W	R341	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1897	301 225 8110	MT-GLAZE	10 JA	1/16W	R342	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1898	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R343	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1899	301 225 8110	MT-GLAZE	10 JA	1/16W	R3432	301 224 9712	MT-GLAZE	22 JA	1/16W
R2800	301 260 4115	MT-GLAZE	75 JA	1/3W	R3437	301 224 9712	MT-GLAZE	22 JA	1/16W
R2801	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3439	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2802	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R344	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2803	301 224 9316	MT-GLAZE	1K JA	1/16W	R3441	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2804	301 224 9316	MT-GLAZE	1K JA	1/16W	R3442	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2805	301 260 4115	MT-GLAZE	75 JA	1/3W	R3444	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2806	301 224 9019	MT-GLAZE	10K JA	1/16W	R3446	301 224 9712	MT-GLAZE	22 JA	1/16W
R2807	301 224 9019	MT-GLAZE	10K JA	1/16W	R3447	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2812	301 224 9019	MT-GLAZE	10K JA	1/16W	R3452	301 224 9316	MT-GLAZE	1K JA	1/16W
R2813	301 224 9019	MT-GLAZE	10K JA	1/16W	R3453	301 224 9316	MT-GLAZE	1K JA	1/16W
R2814	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3454	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2816	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3456	301 225 8110	MT-GLAZE	10 JA	1/16W
R2817	301 224 8814	MT-GLAZE	100 JA	1/16W	R3457	301 225 8110	MT-GLAZE	10 JA	1/16W
R2818	301 224 9019	MT-GLAZE	10K JA	1/16W	R3458	301 225 8110	MT-GLAZE	10 JA	1/16W
R2819	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3459	301 225 8110	MT-GLAZE	10 JA	1/16W
R2851	301 224 9019	MT-GLAZE	10K JA	1/16W	R346	301 224 9019	MT-GLAZE	10K JA	1/16W
R2853	301 224 9019	MT-GLAZE	10K JA	1/16W	R3461	301 224 9316	MT-GLAZE	1K JA	1/16W
R2856	301 224 9019	MT-GLAZE	10K JA	1/16W	R3462	301 224 9019	MT-GLAZE	10K JA	1/16W
R2858	301 224 9019	MT-GLAZE	10K JA	1/16W	R347	301 224 9019	MT-GLAZE	10K JA	1/16W
R2861	301 224 9019	MT-GLAZE	10K JA	1/16W	R3471	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2863	301 237 6715	MT-GLAZE	300 JA	1/16W	R3472	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2864	301 237 6715	MT-GLAZE	300 JA	1/16W	R3473	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2866	301 237 6715	MT-GLAZE	300 JA	1/16W	R3474	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2867	301 237 6715	MT-GLAZE	300 JA	1/16W	R3476	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2868	301 225 1616	MT-GLAZE	390 JA	1/16W	R3477	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2869	301 225 0015	MT-GLAZE	270 JA	1/16W	R3478	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2871	301 225 1616	MT-GLAZE	390 JA	1/16W	R3479	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2872	301 225 0718	MT-GLAZE	56K JA	1/16W	R3503	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2873	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R3506	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R2874	301 225 3818	MT-GLAZE	1.5K JA	1/16W	R3507	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R301	301 256 6017	MT-GLAZE	27K JA	1/10W	R351	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R303	301 224 9019	MT-GLAZE	10K JA	1/16W	R3511	301 224 8913	MT-GLAZE	100K JA	1/16W
R304	301 224 9019	MT-GLAZE	10K JA	1/16W	R352	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R307	301 224 9019	MT-GLAZE	10K JA	1/16W	R353	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R308	401 344 1914	MT-GLAZE	10K DA	1/16W	R3533	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R311	301 263 7420	MT-GLAZE	75 JA	1/16W	R3536	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R312	301 263 7420	MT-GLAZE	75 JA	1/16W	R3537	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R313	301 263 7420	MT-GLAZE	75 JA	1/16W	R354	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R314	401 342 7314	MT-GLAZE	23.2K FA	1/16W	R3541	301 224 8913	MT-GLAZE	100K JA	1/16W
R316	301 224 9019	MT-GLAZE	10K JA	1/16W	R355	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R317	301 224 9019	MT-GLAZE	10K JA	1/16W	R3563	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R318	301 298 5511	MT-GLAZE	8.2K FA	1/16W	R3566	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R319	301 224 9019	MT-GLAZE	10K JA	1/16W	R3567	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R321	301 225 8110	MT-GLAZE	10 JA	1/16W	R3571	301 224 8913	MT-GLAZE	100K JA	1/16W
R322	301 225 8110	MT-GLAZE	10 JA	1/16W	R359	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R323	301 225 1814	MT-GLAZE	47 JA	1/16W	R361	301 224 9019	MT-GLAZE	10K JA	1/16W
R326	301 225 1814	MT-GLAZE	47 JA	1/16W	R362	301 224 9019	MT-GLAZE	10K JA	1/16W
R327	301 225 1814	MT-GLAZE	47 JA	1/16W	R363	301 224 9019	MT-GLAZE	10K JA	1/16W
R328	301 224 9712	MT-GLAZE	22 JA	1/16W	R364	301 224 9019	MT-GLAZE	10K JA	1/16W
R329	301 225 1814	MT-GLAZE	47 JA	1/16W	R366	301 224 9019	MT-GLAZE	10K JA	1/16W
R331	301 224 9712	MT-GLAZE	22 JA	1/16W	R371	301 224 9316	MT-GLAZE	1K JA	1/16W
R332	301 224 9712	MT-GLAZE	22 JA	1/16W	R372	301 224 9316	MT-GLAZE	1K JA	1/16W
R333	301 224 9712	MT-GLAZE	22 JA	1/16W	R373	301 224 9316	MT-GLAZE	1K JA	1/16W
R334	301 224 9712	MT-GLAZE	22 JA	1/16W	R376	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R336	301 224 9712	MT-GLAZE	22 JA	1/16W	R377	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R337	301 224 9712	MT-GLAZE	22 JA	1/16W	R378	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R338	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R379	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R339	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R3801	301 225 8110	MT-GLAZE	10 JA	1/16W
R3402	301 224 9019	MT-GLAZE	10K JA	1/16W	R3803	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R3403	301 224 9019	MT-GLAZE	10K JA	1/16W	R3804	301 225 0213	MT-GLAZE	3.3K JA	1/16W

Electrical Parts List

Key No.	Part No.	Description		
R381	301 224 9316	MT-GLAZE	1K JA	1/16W
R382	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R383	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R384	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R385	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R392	301 265 4516	MT-GLAZE	68K FA	1/10W
R397	301 224 9019	MT-GLAZE	10K JA	1/16W
R398	301 224 9019	MT-GLAZE	10K JA	1/16W
R399	301 224 9019	MT-GLAZE	10K JA	1/16W
R401	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R402	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R403	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R404	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R406	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R407	301 225 0312	MT-GLAZE	33 JA	1/16W
R409	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R411	301 224 8913	MT-GLAZE	100K JA	1/16W
R412	301 225 1319	MT-GLAZE	470 JA	1/16W
R4401	301 224 9019	MT-GLAZE	10K JA	1/16W
R4402	301 224 9019	MT-GLAZE	10K JA	1/16W
R4403	301 224 9019	MT-GLAZE	10K JA	1/16W
R4404	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4406	301 224 9019	MT-GLAZE	10K JA	1/16W
R4407	301 224 9019	MT-GLAZE	10K JA	1/16W
R4408	301 224 9019	MT-GLAZE	10K JA	1/16W
R441	401 345 6710	MT-GLAZE	68 DA	1/16W
R4411	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4412	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4413	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4414	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4415	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4416	301 225 1616	MT-GLAZE	390 JA	1/16W
R4417	301 225 8011	MT-GLAZE	330 JA	1/16W
R4418	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4419	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4421	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4422	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4423	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4424	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4426	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4427	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4428	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4429	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4431	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4432	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4433	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4435	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R444	301 225 1814	MT-GLAZE	47 JA	1/16W
R4452	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4457	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R446	301 225 1814	MT-GLAZE	47 JA	1/16W
R4467	301 224 9019	MT-GLAZE	10K JA	1/16W
R4468	301 224 9019	MT-GLAZE	10K JA	1/16W
R4469	301 224 9019	MT-GLAZE	10K JA	1/16W
R447	301 225 1814	MT-GLAZE	47 JA	1/16W
R4472	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4473	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R448	301 225 1814	MT-GLAZE	47 JA	1/16W
R449	301 225 1814	MT-GLAZE	47 JA	1/16W
R4497	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4498	301 224 9316	MT-GLAZE	1K JA	1/16W
R451	301 225 1814	MT-GLAZE	47 JA	1/16W
R4603	945 030 1057	PROTECTOR,IC 3.8A 72V		
R461	401 345 6710	MT-GLAZE	68 DA	1/16W
R4621	301 224 9019	MT-GLAZE	10K JA	1/16W
R4622	301 224 9019	MT-GLAZE	10K JA	1/16W
R4623	301 224 9910	MT-GLAZE	22K JA	1/16W
R4624	301 224 9910	MT-GLAZE	22K JA	1/16W
R464	301 225 1814	MT-GLAZE	47 JA	1/16W
R466	301 225 1814	MT-GLAZE	47 JA	1/16W
R467	301 225 1814	MT-GLAZE	47 JA	1/16W
R468	301 225 1814	MT-GLAZE	47 JA	1/16W
R469	301 225 1814	MT-GLAZE	47 JA	1/16W
R471	301 225 1814	MT-GLAZE	47 JA	1/16W
R4803	301 224 9316	MT-GLAZE	1K JA	1/16W
R4804	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4806	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R4808	301 224 9514	MT-GLAZE	2.2K JA	1/16W
R4809	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R481	401 345 6710	MT-GLAZE	68 DA	1/16W
R4812	301 224 9019	MT-GLAZE	10K JA	1/16W
R4813	301 224 9019	MT-GLAZE	10K JA	1/16W
R4814	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R484	301 225 1814	MT-GLAZE	47 JA	1/16W
R486	301 225 1814	MT-GLAZE	47 JA	1/16W
R487	301 225 1814	MT-GLAZE	47 JA	1/16W
R488	301 225 1814	MT-GLAZE	47 JA	1/16W
R489	301 225 1814	MT-GLAZE	47 JA	1/16W
R4892	301 224 8814	MT-GLAZE	100 JA	1/16W
R4893	301 302 7824	MT-GLAZE	30K DA	1/16W
R4894	401 344 1914	MT-GLAZE	10K DA	1/16W
R4896	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R4897	301 225 8011	MT-GLAZE	330 JA	1/16W
R491	301 225 1814	MT-GLAZE	47 JA	1/16W
R501	301 225 2118	MT-GLAZE	12K JA	1/16W
R502	301 225 1814	MT-GLAZE	47 JA	1/16W
R503	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5101	301 198 7714	MT-GLAZE	33 JA	1W
R5102	301 224 9019	MT-GLAZE	10K JA	1/16W
R5103	301 294 2613	MT-GLAZE	4.7K FA	1/16W
R5104	301 301 3718	MT-GLAZE	2K FA	1/16W
R5106	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R5107	301 226 5514	MT-GLAZE	120 JA	1/16W
R5108	301 198 7714	MT-GLAZE	33 JA	1W
R5109	301 198 7714	MT-GLAZE	33 JA	1W
R5111	301 234 8118	MT-GLAZE	4.7 JA	1W
R5112	301 224 9019	MT-GLAZE	10K JA	1/16W
R5113	301 298 6518	MT-GLAZE	3.3K FA	1/16W
R5114	301 294 3115	MT-GLAZE	1K FA	1/16W
R5116	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R5117	301 301 0410	MT-GLAZE	240 FA	1/16W
R5121	301 224 9019	MT-GLAZE	10K JA	1/16W
R5122	301 294 4518	MT-GLAZE	18K FA	1/16W
R5123	301 224 9316	MT-GLAZE	1K JA	1/16W
R5124	301 224 9316	MT-GLAZE	1K JA	1/16W
R5126	301 224 9019	MT-GLAZE	10K JA	1/16W
R5127	301 224 9019	MT-GLAZE	10K JA	1/16W
R5128	301 224 9217	MT-GLAZE	15K JA	1/16W
R5129	301 224 9316	MT-GLAZE	1K JA	1/16W
R5131	301 224 9217	MT-GLAZE	15K JA	1/16W
R5141	301 224 9019	MT-GLAZE	10K JA	1/16W
R5142	301 224 9613	MT-GLAZE	2.7K JA	1/16W
R5151	301 224 9316	MT-GLAZE	1K JA	1/16W
R5204	301 225 8813	MT-GLAZE	39 JA	1/16W
R5206	301 225 8813	MT-GLAZE	39 JA	1/16W
R5207	301 225 8813	MT-GLAZE	39 JA	1/16W
R5208	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5209	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5213	301 225 1814	MT-GLAZE	47 JA	1/16W
R5214	301 224 9019	MT-GLAZE	10K JA	1/16W
R5215	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R5216	301 224 9019	MT-GLAZE	10K JA	1/16W
R5217	301 224 9019	MT-GLAZE	10K JA	1/16W
R5218	301 224 9019	MT-GLAZE	10K JA	1/16W

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
R5222	301 224 9316	MT-GLAZE	1K JA	1/16W	R5503	301 190 1710	MT-GLAZE	0.000 ZA	1W
R5223	301 224 9316	MT-GLAZE	1K JA	1/16W	R5504	301 225 2019	MT-GLAZE	680 JA	1/16W
R5224	301 225 8110	MT-GLAZE	10 JA	1/16W	R5508	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R5226	301 225 8110	MT-GLAZE	10 JA	1/16W	R5551	301 190 1710	MT-GLAZE	0.000 ZA	1W
R5227	301 225 8110	MT-GLAZE	10 JA	1/16W	R5552	301 224 9316	MT-GLAZE	1K JA	1/16W
R5228	301 225 8110	MT-GLAZE	10 JA	1/16W	R5554	301 224 9316	MT-GLAZE	1K JA	1/16W
R5229	301 225 8110	MT-GLAZE	10 JA	1/16W	R5557	301 225 2019	MT-GLAZE	680 JA	1/16W
R5231	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R5558	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R5232	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R5563	301 224 8913	MT-GLAZE	100K JA	1/16W
R5241	301 225 1913	MT-GLAZE	68 JA	1/16W	R5564	301 224 8913	MT-GLAZE	100K JA	1/16W
R5242	301 225 1913	MT-GLAZE	68 JA	1/16W	R5566	301 224 8913	MT-GLAZE	100K JA	1/16W
R5243	301 225 1913	MT-GLAZE	68 JA	1/16W	R5567	301 224 8913	MT-GLAZE	100K JA	1/16W
R5251	301 225 1111	MT-GLAZE	27 JA	1/16W	R5606	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R5252	301 225 1111	MT-GLAZE	27 JA	1/16W	R5607	301 294 3511	MT-GLAZE	27K FA	1/16W
R5253	301 225 1111	MT-GLAZE	27 JA	1/16W	R5608	301 301 8010	MT-GLAZE	1.5K FA	1/16W
R5254	301 224 9316	MT-GLAZE	1K JA	1/16W	R5609	401 344 1914	MT-GLAZE	10K DA	1/16W
R5256	301 224 9316	MT-GLAZE	1K JA	1/16W	R561	301 225 2118	MT-GLAZE	12K JA	1/16W
R5257	301 224 9316	MT-GLAZE	1K JA	1/16W	R5611	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R5258	301 225 8110	MT-GLAZE	10 JA	1/16W	R5612	301 224 9415	MT-GLAZE	1M JA	1/16W
R5259	301 225 8110	MT-GLAZE	10 JA	1/16W	R5613	301 284 3326	MT-GLAZE	3K FA	1/16W
R5261	301 225 8110	MT-GLAZE	10 JA	1/16W	R5614	301 224 9019	MT-GLAZE	10K JA	1/16W
R5262	301 224 8814	MT-GLAZE	100 JA	1/16W	R5616	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5265	301 225 8110	MT-GLAZE	10 JA	1/16W	R562	301 225 1814	MT-GLAZE	47 JA	1/16W
R5268	301 225 0015	MT-GLAZE	270 JA	1/16W	R5622	301 224 9019	MT-GLAZE	10K JA	1/16W
R5292	301 224 9019	MT-GLAZE	10K JA	1/16W	R5626	301 294 3313	MT-GLAZE	15K FA	1/16W
R5293	301 037 5017	MT-GLAZE	0.000 ZA	1/10W	R5627	301 294 4419	MT-GLAZE	1.8K FA	1/16W
R5294	301 298 6518	MT-GLAZE	3.3K FA	1/16W	R5628	401 344 1914	MT-GLAZE	10K DA	1/16W
R5296	301 294 3115	MT-GLAZE	1K FA	1/16W	R563	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5297	301 301 0410	MT-GLAZE	240 FA	1/16W	R5632	301 224 9019	MT-GLAZE	10K JA	1/16W
R5301	301 224 9019	MT-GLAZE	10K JA	1/16W	R5636	301 294 3313	MT-GLAZE	15K FA	1/16W
R5302	301 224 9019	MT-GLAZE	10K JA	1/16W	R5637	301 294 4419	MT-GLAZE	1.8K FA	1/16W
R5303	301 225 2118	MT-GLAZE	12K JA	1/16W	R5638	401 344 1914	MT-GLAZE	10K DA	1/16W
R5306	301 224 8913	MT-GLAZE	100K JA	1/16W	R5646	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R5307	301 224 9316	MT-GLAZE	1K JA	1/16W	R5647	401 344 1914	MT-GLAZE	10K DA	1/16W
R5308	301 224 9316	MT-GLAZE	1K JA	1/16W	R5648	301 298 6518	MT-GLAZE	3.3K FA	1/16W
R5309	301 224 9316	MT-GLAZE	1K JA	1/16W	R5649	401 344 1914	MT-GLAZE	10K DA	1/16W
R531	301 225 2118	MT-GLAZE	12K JA	1/16W	R5651	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R5311	301 224 9316	MT-GLAZE	1K JA	1/16W	R5652	301 224 9415	MT-GLAZE	1M JA	1/16W
R5312	301 224 9316	MT-GLAZE	1K JA	1/16W	R5653	301 284 3326	MT-GLAZE	3K FA	1/16W
R532	301 225 1814	MT-GLAZE	47 JA	1/16W	R5654	301 224 9019	MT-GLAZE	10K JA	1/16W
R5321	301 224 8814	MT-GLAZE	100 JA	1/16W	R5656	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5322	301 224 9415	MT-GLAZE	1M JA	1/16W	R5662	301 224 9019	MT-GLAZE	10K JA	1/16W
R5323	301 225 1517	MT-GLAZE	3.9K JA	1/16W	R5666	301 301 8119	MT-GLAZE	3.9K FA	1/16W
R5324	301 224 8814	MT-GLAZE	100 JA	1/16W	R5667	301 294 3115	MT-GLAZE	1K FA	1/16W
R5326	301 224 8814	MT-GLAZE	100 JA	1/16W	R5668	401 344 1914	MT-GLAZE	10K DA	1/16W
R5327	301 224 8814	MT-GLAZE	100 JA	1/16W	R5671	301 224 9019	MT-GLAZE	10K JA	1/16W
R5328	301 224 8814	MT-GLAZE	100 JA	1/16W	R5672	301 224 9019	MT-GLAZE	10K JA	1/16W
R5329	301 224 8814	MT-GLAZE	100 JA	1/16W	R5673	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R533	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R5682	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R5331	301 224 8814	MT-GLAZE	100 JA	1/16W	R5686	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R5332	301 224 9316	MT-GLAZE	1K JA	1/16W	R5687	301 302 5414	MT-GLAZE	220 FA	1/16W
R5333	301 224 9316	MT-GLAZE	1K JA	1/16W	R5688	301 294 3115	MT-GLAZE	1K FA	1/16W
R5334	301 224 9019	MT-GLAZE	10K JA	1/16W	R5692	301 224 9019	MT-GLAZE	10K JA	1/16W
R5336	301 224 9316	MT-GLAZE	1K JA	1/16W	R5694	301 302 7824	MT-GLAZE	30K DA	1/16W
R5337	301 224 9316	MT-GLAZE	1K JA	1/16W	R5696	401 344 1914	MT-GLAZE	10K DA	1/16W
R5338	301 226 2414	MT-GLAZE	560 JA	1/16W	R5697	301 225 8011	MT-GLAZE	330 JA	1/16W
R5339	301 240 9710	MT-GLAZE	820K JA	1/16W	R5698	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R5342	301 225 0718	MT-GLAZE	56K JA	1/16W	R5841	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R5343	301 224 9316	MT-GLAZE	1K JA	1/16W	R5851	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5361	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R5852	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5362	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R6208	301 225 8110	MT-GLAZE	10 JA	1/16W
R5363	301 225 8110	MT-GLAZE	10 JA	1/16W	R6209	301 225 8110	MT-GLAZE	10 JA	1/16W
R5364	301 225 8110	MT-GLAZE	10 JA	1/16W	R6213	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R5366	301 225 8110	MT-GLAZE	10 JA	1/16W	R6214	301 294 3214	MT-GLAZE	47K FA	1/16W
R5367	301 225 8110	MT-GLAZE	10 JA	1/16W	R6218	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5501	301 224 9316	MT-GLAZE	1K JA	1/16W	R6221	301 225 8110	MT-GLAZE	10 JA	1/16W
R5502	301 224 9316	MT-GLAZE	1K JA	1/16W	R6222	301 225 8110	MT-GLAZE	10 JA	1/16W

Electrical Parts List

Key No.	Part No.	Description		
R6223	301 225 8110	MT-GLAZE	10 JA	1/16W
R6224	301 225 8110	MT-GLAZE	10 JA	1/16W
R6226	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R6227	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R6231	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6232	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6234	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6236	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6237	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6262	301 224 9019	MT-GLAZE	10K JA	1/16W
R6266	401 345 6215	MT-GLAZE	2K DA	1/16W
R6267	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6268	301 294 3115	MT-GLAZE	1K FA	1/16W
R6272	301 224 9019	MT-GLAZE	10K JA	1/16W
R6274	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R6276	301 301 8119	MT-GLAZE	3.9K FA	1/16W
R6277	301 236 7119	MT-GLAZE	620 JA	1/16W
R6278	401 344 1914	MT-GLAZE	10K DA	1/16W
R6282	301 224 9019	MT-GLAZE	10K JA	1/16W
R6284	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R6286	301 301 8119	MT-GLAZE	3.9K FA	1/16W
R6287	301 236 7119	MT-GLAZE	620 JA	1/16W
R6288	401 344 1914	MT-GLAZE	10K DA	1/16W
R6501	301 225 8110	MT-GLAZE	10 JA	1/16W
R6502	301 225 8110	MT-GLAZE	10 JA	1/16W
R6531	301 102 7410	MT-GLAZE	10 JA	1W
R6532	301 102 7410	MT-GLAZE	10 JA	1W
R6533	301 225 8110	MT-GLAZE	10 JA	1/16W
R6537	301 224 9316	MT-GLAZE	1K JA	1/16W
R6538	301 226 2414	MT-GLAZE	560 JA	1/16W
R6541	301 225 8110	MT-GLAZE	10 JA	1/16W
R6542	301 225 8110	MT-GLAZE	10 JA	1/16W
R6544	301 225 8110	MT-GLAZE	10 JA	1/16W
R6551	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6552	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6554	301 225 8110	MT-GLAZE	10 JA	1/16W
R6556	301 225 8110	MT-GLAZE	10 JA	1/16W
R6557	301 225 8110	MT-GLAZE	10 JA	1/16W
R6558	301 225 8110	MT-GLAZE	10 JA	1/16W
R6561	301 225 8110	MT-GLAZE	10 JA	1/16W
R6563	301 102 7410	MT-GLAZE	10 JA	1W
R6564	301 102 7410	MT-GLAZE	10 JA	1W
R6566	301 225 8110	MT-GLAZE	10 JA	1/16W
R6568	301 226 2414	MT-GLAZE	560 JA	1/16W
R6573	301 224 9316	MT-GLAZE	1K JA	1/16W
R6671	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R6672	301 284 3326	MT-GLAZE	3K FA	1/16W
R6673	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R6674	401 344 1914	MT-GLAZE	10K DA	1/16W
R6675	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R6677	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6678	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R6681	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R6682	301 224 9415	MT-GLAZE	1M JA	1/16W
R6683	301 284 3326	MT-GLAZE	3K FA	1/16W
R6684	301 224 9019	MT-GLAZE	10K JA	1/16W
R6691	301 294 4419	MT-GLAZE	1.8K FA	1/16W
R6692	301 294 3313	MT-GLAZE	15K FA	1/16W
R6693	401 344 1914	MT-GLAZE	10K DA	1/16W
R6694	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R6801	301 298 6518	MT-GLAZE	3.3K FA	1/16W
R6802	301 299 2410	MT-GLAZE	5.6K FA	1/16W
R6803	301 294 3214	MT-GLAZE	47K FA	1/16W
R6804	301 294 4518	MT-GLAZE	18K FA	1/16W
R6806	301 298 5511	MT-GLAZE	8.2K FA	1/16W
R6807	301 299 2410	MT-GLAZE	5.6K FA	1/16W
R6808	301 298 6518	MT-GLAZE	3.3K FA	1/16W
R6809	301 298 5511	MT-GLAZE	8.2K FA	1/16W
R6811	301 299 2410	MT-GLAZE	5.6K FA	1/16W
R6812	301 298 6518	MT-GLAZE	3.3K FA	1/16W
R6813	401 344 1914	MT-GLAZE	10K DA	1/16W
R6814	401 344 1914	MT-GLAZE	10K DA	1/16W
R6816	401 344 1914	MT-GLAZE	10K DA	1/16W
R7201	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7203	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7205	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7206	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7208	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R7209	301 226 5415	MT-GLAZE	56 JA	1/16W
R7212	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7213	301 224 8814	MT-GLAZE	100 JA	1/16W
R7214	301 224 8814	MT-GLAZE	100 JA	1/16W
R7216	301 224 8814	MT-GLAZE	100 JA	1/16W
R7217	301 224 8814	MT-GLAZE	100 JA	1/16W
R7218	301 224 8814	MT-GLAZE	100 JA	1/16W
R7219	301 226 5415	MT-GLAZE	56 JA	1/16W
R7221	301 226 5415	MT-GLAZE	56 JA	1/16W
R7222	301 226 5415	MT-GLAZE	56 JA	1/16W
R7223	301 226 5415	MT-GLAZE	56 JA	1/16W
R7224	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R7226	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R7227	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R7228	301 225 0312	MT-GLAZE	33 JA	1/16W
R7229	301 225 0312	MT-GLAZE	33 JA	1/16W
R7231	301 225 0312	MT-GLAZE	33 JA	1/16W
R7232	301 225 8110	MT-GLAZE	10 JA	1/16W
R7233	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7234	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R7236	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R7237	301 225 8011	MT-GLAZE	330 JA	1/16W
R7238	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7239	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7241	301 224 9514	MT-GLAZE	2.2K JA	1/16W
R7242	301 225 8011	MT-GLAZE	330 JA	1/16W
R7261	301 225 0312	MT-GLAZE	33 JA	1/16W
R7282	301 224 9019	MT-GLAZE	10K JA	1/16W
R7283	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R7284	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R7286	301 294 3115	MT-GLAZE	1K FA	1/16W
R7287	301 263 7420	MT-GLAZE	75 JA	1/16W
R7288	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R7292	301 224 9019	MT-GLAZE	10K JA	1/16W
R7293	301 272 7814	MT-GLAZE	100 FA	1/16W
R7294	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7295	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R7296	301 294 3115	MT-GLAZE	1K FA	1/16W
R7601	301 234 7616	MT-GLAZE	3.9 JA	1W
R7602	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R7603	301 301 3718	MT-GLAZE	2K FA	1/16W
R7604	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7606	301 294 3115	MT-GLAZE	1K FA	1/16W
R7607	301 234 7616	MT-GLAZE	3.9 JA	1W
R7611	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R7612	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R7613	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7614	301 294 3115	MT-GLAZE	1K FA	1/16W
R7622	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R7623	301 298 5818	MT-GLAZE	9.1K FA	1/16W
R7624	301 301 8218	MT-GLAZE	680 FA	1/16W
R7626	301 301 3718	MT-GLAZE	2K FA	1/16W
R7642	301 303 4010	MT-GLAZE	1.2K DA	1/16W
R7643	301 338 0919	MT-GLAZE	75 DA	1/16W
R7644	301 294 3115	MT-GLAZE	1K FA	1/16W
R7646	301 150 6014	MT-GLAZE	0.000 ZA	1/10W

Electrical Parts List

Key No.	Part No.	Description		
R7651	301 294 4419	MT-GLAZE	1.8K FA	1/16W
R7652	301 294 3313	MT-GLAZE	15K FA	1/16W
R7653	401 344 1914	MT-GLAZE	10K DA	1/16W
R7654	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R7661	301 294 4419	MT-GLAZE	1.8K FA	1/16W
R7662	301 294 3313	MT-GLAZE	15K FA	1/16W
R7663	401 344 1914	MT-GLAZE	10K DA	1/16W
R7664	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R7666	301 234 7616	MT-GLAZE	3.9 JA	1W
R7821	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7822	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7823	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7824	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7825	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7826	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7828	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7831	301 224 9316	MT-GLAZE	1K JA	1/16W
R7832	301 224 9316	MT-GLAZE	1K JA	1/16W
R7833	301 224 9316	MT-GLAZE	1K JA	1/16W
R7834	301 224 9316	MT-GLAZE	1K JA	1/16W
R7836	301 224 9316	MT-GLAZE	1K JA	1/16W
R7837	301 224 9019	MT-GLAZE	10K JA	1/16W
R7838	301 224 9019	MT-GLAZE	10K JA	1/16W
R7839	301 224 9019	MT-GLAZE	10K JA	1/16W
R7841	301 224 9019	MT-GLAZE	10K JA	1/16W
R7842	301 224 9019	MT-GLAZE	10K JA	1/16W
R7843	301 224 9019	MT-GLAZE	10K JA	1/16W
R7844	301 224 9019	MT-GLAZE	10K JA	1/16W
R7846	301 224 9019	MT-GLAZE	10K JA	1/16W
R7847	301 224 9019	MT-GLAZE	10K JA	1/16W
R7848	301 224 9019	MT-GLAZE	10K JA	1/16W
R8001	301 224 9019	MT-GLAZE	10K JA	1/16W
R8002	301 225 1616	MT-GLAZE	390 JA	1/16W
R8003	301 224 8913	MT-GLAZE	100K JA	1/16W
R8004	301 225 0312	MT-GLAZE	33 JA	1/16W
R8006	301 225 0312	MT-GLAZE	33 JA	1/16W
R8007	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8008	301 224 9019	MT-GLAZE	10K JA	1/16W
R8009	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R801	301 224 9019	MT-GLAZE	10K JA	1/16W
R8011	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8013	301 224 9514	MT-GLAZE	2.2K JA	1/16W
R8016	301 225 0312	MT-GLAZE	33 JA	1/16W
R8017	301 225 0312	MT-GLAZE	33 JA	1/16W
R8018	301 225 0312	MT-GLAZE	33 JA	1/16W
R8019	301 225 0312	MT-GLAZE	33 JA	1/16W
R8022	301 224 9019	MT-GLAZE	10K JA	1/16W
R804	301 224 9019	MT-GLAZE	10K JA	1/16W
R806	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R807	301 224 9019	MT-GLAZE	10K JA	1/16W
R808	301 224 9019	MT-GLAZE	10K JA	1/16W
R809	301 294 4419	MT-GLAZE	1.8K FA	1/16W
R8101	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R8102	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R8111	301 224 9019	MT-GLAZE	10K JA	1/16W
R812	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8121	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8122	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8123	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8124	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8128	301 224 9019	MT-GLAZE	10K JA	1/16W
R8129	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8133	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8134	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8202	301 225 0015	MT-GLAZE	270 JA	1/16W
R8203	301 225 0015	MT-GLAZE	270 JA	1/16W
R8204	301 225 0015	MT-GLAZE	270 JA	1/16W
R8212	301 224 9712	MT-GLAZE	22 JA	1/16W
R8213	301 224 9712	MT-GLAZE	22 JA	1/16W
R8214	301 224 9712	MT-GLAZE	22 JA	1/16W
R8235	301 263 7420	MT-GLAZE	75 JA	1/16W
R8237	301 263 7420	MT-GLAZE	75 JA	1/16W
R8248	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R861	301 225 0718	MT-GLAZE	56K JA	1/16W
R862	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R863	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R864	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R865	301 224 9316	MT-GLAZE	1K JA	1/16W
R866	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R867	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R868	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R869	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8701	401 302 1027	MT-GLAZE	12K DA	1/16W
R8702	401 344 1914	MT-GLAZE	10K DA	1/16W
R8703	401 344 1914	MT-GLAZE	10K DA	1/16W
R8704	401 344 1914	MT-GLAZE	10K DA	1/16W
R8705	401 344 1914	MT-GLAZE	10K DA	1/16W
R8706	401 344 1914	MT-GLAZE	10K DA	1/16W
R8707	401 344 1914	MT-GLAZE	10K DA	1/16W
R8708	401 344 1914	MT-GLAZE	10K DA	1/16W
R8709	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R871	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8712	401 344 1914	MT-GLAZE	10K DA	1/16W
R8713	401 344 1914	MT-GLAZE	10K DA	1/16W
R8714	401 344 1914	MT-GLAZE	10K DA	1/16W
R8716	401 344 1914	MT-GLAZE	10K DA	1/16W
R8717	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8718	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8802	301 224 9019	MT-GLAZE	10K JA	1/16W
R8803	301 302 7824	MT-GLAZE	30K DA	1/16W
R8804	401 344 1914	MT-GLAZE	10K DA	1/16W
R8806	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R8807	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R881	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R882	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8821	401 351 6018	MT-GLAZE	220K DA	1/16W
R8822	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R883	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8831	401 351 6018	MT-GLAZE	220K DA	1/16W
R8832	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R884	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R8841	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R8842	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R885	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R886	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R887	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R888	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R889	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R9701	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R9702	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R9703	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R9706	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R9707	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R9708	401 350 1014	MT-GLAZE	51 DA	1/10W
R9709	401 350 1014	MT-GLAZE	51 DA	1/10W
R9711	401 350 1014	MT-GLAZE	51 DA	1/10W
R9712	401 350 1014	MT-GLAZE	51 DA	1/10W
R9713	401 350 1014	MT-GLAZE	51 DA	1/10W
R9714	401 350 1014	MT-GLAZE	51 DA	1/10W
R9716	401 350 1014	MT-GLAZE	51 DA	1/10W
R9717	401 350 1014	MT-GLAZE	51 DA	1/10W
R9718	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R9719	401 350 1014	MT-GLAZE	51 DA	1/10W
R9721	401 350 1014	MT-GLAZE	51 DA	1/10W

Electrical Parts List

Key No.	Part No.	Description
R9722	401 350 1014	MT-GLAZE 51 DA 1/10W
R9723	401 350 1014	MT-GLAZE 51 DA 1/10W
R9724	401 350 1014	MT-GLAZE 51 DA 1/10W
R9726	401 350 1014	MT-GLAZE 51 DA 1/10W
R9727	401 350 1014	MT-GLAZE 51 DA 1/10W
R9728	401 350 1014	MT-GLAZE 51 DA 1/10W
R9729	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9731	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9732	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9733	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9734	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R9736	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
RB311	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB312	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB313	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB314	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB316	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB317	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB318	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB319	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB321	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB322	645 049 0668	R-NETWORK 10X4 1/32W
	945 049 0683	R-NETWORK 10X4 1/16W
RB323	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB324	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB326	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB327	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB328	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB329	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB331	945 034 5051	R-NETWORK 22X4 1/32W
	945 037 0824	R-NETWORK 22X4 1/16W
RB332	945 034 5051	R-NETWORK 22X4 1/32W
	945 037 0824	R-NETWORK 22X4 1/16W
RB333	945 034 5051	R-NETWORK 22X4 1/32W
	945 037 0824	R-NETWORK 22X4 1/16W
RB334	945 034 5051	R-NETWORK 22X4 1/32W
	945 037 0824	R-NETWORK 22X4 1/16W
RB336	945 034 5051	R-NETWORK 22X4 1/32W
	945 037 0824	R-NETWORK 22X4 1/16W
RB337	945 034 5051	R-NETWORK 22X4 1/32W
	945 037 0824	R-NETWORK 22X4 1/16W
RB401	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB402	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB403	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB404	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB406	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB407	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB411	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB412	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB413	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB414	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB416	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB417	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB421	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB422	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB423	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB431	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB432	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB433	645 052 1676	R-NETWORK 1.5KX4 1/32W
	645 052 3090	R-NETWORK 1.5KX4 1/16W
RB4401	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4402	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4403	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4404	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4406	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4407	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4408	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4409	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB441	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4411	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB4412	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB442	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4421	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4422	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4423	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4424	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4426	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4427	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB443	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4431	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W
RB4432	945 036 0986	R-NETWORK 47X4 1/32W
	945 037 0831	R-NETWORK 47X4 1/16W

Electrical Parts List

Key No.	Part No.	Description	
RB4433	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4434	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4436	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4437	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB444	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4441	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4442	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4443	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4444	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4446	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB4447	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB446	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB447	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB448	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB449	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB451	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB452	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB453	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB454	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB461	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB462	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB463	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB464	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB466	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB467	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB468	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB469	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB471	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB472	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB473	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB474	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB481	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB482	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB483	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB484	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB486	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB487	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB488	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB489	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB491	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB492	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB493	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB494	945 036 0986	R-NETWORK 47X4	1/32W
	945 037 0831	R-NETWORK 47X4	1/16W
RB6201	645 049 0668	R-NETWORK 10X4	1/32W
	945 049 0683	R-NETWORK 10X4	1/16W
RB6202	645 049 0668	R-NETWORK 10X4	1/32W
	945 049 0683	R-NETWORK 10X4	1/16W
RB6203	645 049 0668	R-NETWORK 10X4	1/32W
	945 049 0683	R-NETWORK 10X4	1/16W
RB6204	645 049 0668	R-NETWORK 10X4	1/32W
	945 049 0683	R-NETWORK 10X4	1/16W
RB6205	645 049 0668	R-NETWORK 10X4	1/32W
	945 049 0683	R-NETWORK 10X4	1/16W
RB6206	645 049 0668	R-NETWORK 10X4	1/32W
	945 049 0683	R-NETWORK 10X4	1/16W
RB6207	645 049 0668	R-NETWORK 10X4	1/32W
	945 049 0683	R-NETWORK 10X4	1/16W
RB7201	945 029 5783	R-NETWORK 100X4	1/32W
	945 028 0697	R-NETWORK 100X4	1/16W
RB7202	945 029 5783	R-NETWORK 100X4	1/32W
	945 028 0697	R-NETWORK 100X4	1/16W
RB7203	945 029 5783	R-NETWORK 100X4	1/32W
	945 028 0697	R-NETWORK 100X4	1/16W
RB7204	945 029 5783	R-NETWORK 100X4	1/32W
	945 028 0697	R-NETWORK 100X4	1/16W
RB7205	945 029 5783	R-NETWORK 100X4	1/32W
	945 028 0697	R-NETWORK 100X4	1/16W
RB7206	945 029 5783	R-NETWORK 100X4	1/32W
	945 028 0697	R-NETWORK 100X4	1/16W
RB8001	645 049 0675	R-NETWORK 33X4	1/32W
	945 049 0690	R-NETWORK 33X4	1/16W
RB8002	645 049 0675	R-NETWORK 33X4	1/32W
	945 049 0690	R-NETWORK 33X4	1/16W
RB8003	645 049 0675	R-NETWORK 33X4	1/32W
	945 049 0690	R-NETWORK 33X4	1/16W
RB8004	645 049 0675	R-NETWORK 33X4	1/32W
	945 049 0690	R-NETWORK 33X4	1/16W
RB8006	645 049 0675	R-NETWORK 33X4	1/32W
	945 049 0690	R-NETWORK 33X4	1/16W
RB8007	645 049 0675	R-NETWORK 33X4	1/32W
	945 049 0690	R-NETWORK 33X4	1/16W
COIL			
L1001	945 070 3660	INDUCTOR,90 OHM	
L1002	945 070 3660	INDUCTOR,90 OHM	
L1003	945 070 3660	INDUCTOR,90 OHM	
L1004	945 070 3660	INDUCTOR,90 OHM	
L1031	945 086 7560	FILTER,EMI 200MHZ	
L1032	945 086 7560	FILTER,EMI 200MHZ	
L1033	945 086 7577	FILTER,EMI 400MHZ	
L1034	945 086 7577	FILTER,EMI 400MHZ	

Electrical Parts List

Key No.	Part No.	Description
L1036	945 086 7577	FILTER,EMI 400MHZ
L1051	945 086 7577	FILTER,EMI 400MHZ
L1052	945 086 7577	FILTER,EMI 400MHZ
L1053	945 086 7577	FILTER,EMI 400MHZ
L1056	945 086 7560	FILTER,EMI 200MHZ
L1057	945 086 7560	FILTER,EMI 200MHZ
L1062	945 086 6037	IMPEDANCE,330 OHM P
L1091	945 041 1978	INDUCTOR,330 OHM
L1501	945 086 6662	IMPEDANCE,600 OHM P
L1502	945 086 6662	IMPEDANCE,600 OHM P
L1503	945 001 5923	INDUCTOR,2.2U M
L1504	945 001 5923	INDUCTOR,2.2U M
L1531	945 086 6662	IMPEDANCE,600 OHM P
L1532	945 086 6662	IMPEDANCE,600 OHM P
L1533	945 001 5923	INDUCTOR,2.2U M
L1534	945 001 5923	INDUCTOR,2.2U M
L1561	945 086 6662	IMPEDANCE,600 OHM P
L1562	945 086 6662	IMPEDANCE,600 OHM P
L1563	945 001 5923	INDUCTOR,2.2U M
L1564	945 001 5923	INDUCTOR,2.2U M
L1802	945 041 1978	INDUCTOR,330 OHM
L1803	945 041 1978	INDUCTOR,330 OHM
L1881	945 041 1978	INDUCTOR,330 OHM
L2801	945 086 6037	IMPEDANCE,330 OHM P
L2802	945 086 6037	IMPEDANCE,330 OHM P
L2803	945 086 6037	IMPEDANCE,330 OHM P
L311	945 050 8449	IMPEDANCE,1000 OHM P
L312	945 050 8449	IMPEDANCE,1000 OHM P
L316	945 050 8449	IMPEDANCE,1000 OHM P
L318	945 050 8449	IMPEDANCE,1000 OHM P
L321	945 050 8449	IMPEDANCE,1000 OHM P
L326	945 050 8449	IMPEDANCE,1000 OHM P
L361	945 050 8449	IMPEDANCE,1000 OHM P
L363	945 050 8449	IMPEDANCE,1000 OHM P
L366	945 050 8449	IMPEDANCE,1000 OHM P
L368	945 050 8449	IMPEDANCE,1000 OHM P
L371	945 050 8449	IMPEDANCE,1000 OHM P
L372	945 050 8449	IMPEDANCE,1000 OHM P
L3801	945 041 1978	INDUCTOR,330 OHM
L401	945 002 5045	INDUCTOR,0.10U M
L441	645 093 6463	IMPEDANCE,120 OHM P
L442	645 093 6463	IMPEDANCE,120 OHM P
L443	645 093 6463	IMPEDANCE,120 OHM P
L4499	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
L4601	945 023 2979	INDUCTOR,800 OHM
L4602	945 023 2979	INDUCTOR,800 OHM
L4603	945 023 2979	INDUCTOR,800 OHM
L4604	945 023 2979	INDUCTOR,800 OHM
L4606	945 023 2979	INDUCTOR,800 OHM
L4607	945 030 9855	INDUCTOR,600 OHM
L4608	945 030 9855	INDUCTOR,600 OHM
L4609	945 023 2979	INDUCTOR,800 OHM
L461	645 093 6463	IMPEDANCE,120 OHM P
L4611	945 086 6037	IMPEDANCE,330 OHM P
L4612	945 023 2979	INDUCTOR,800 OHM
L4613	945 023 2979	INDUCTOR,800 OHM
L4614	945 023 2979	INDUCTOR,800 OHM
L4616	945 086 6037	IMPEDANCE,330 OHM P
L4618	945 086 6037	IMPEDANCE,330 OHM P
L462	645 093 6463	IMPEDANCE,120 OHM P
L463	645 093 6463	IMPEDANCE,120 OHM P
L4641	945 086 6037	IMPEDANCE,330 OHM P
L4642	945 086 6037	IMPEDANCE,330 OHM P
L4643	945 086 6037	IMPEDANCE,330 OHM P
L4644	945 086 6037	IMPEDANCE,330 OHM P
L4646	945 086 6037	IMPEDANCE,330 OHM P
L4647	945 086 6037	IMPEDANCE,330 OHM P
L4648	945 086 6037	IMPEDANCE,330 OHM P
L4801	945 041 1978	INDUCTOR,330 OHM
L481	645 093 6463	IMPEDANCE,120 OHM P
L4817	945 086 6037	IMPEDANCE,330 OHM P
L4818	945 086 6037	IMPEDANCE,330 OHM P
L4819	945 086 6037	IMPEDANCE,330 OHM P
L482	645 093 6463	IMPEDANCE,120 OHM P
L4821	945 086 6037	IMPEDANCE,330 OHM P
L4822	945 086 6037	IMPEDANCE,330 OHM P
L4823	945 086 6037	IMPEDANCE,330 OHM P
L4824	945 086 6037	IMPEDANCE,330 OHM P
L4826	945 086 6037	IMPEDANCE,330 OHM P
L483	645 093 6463	IMPEDANCE,120 OHM P
L501	645 093 6463	IMPEDANCE,120 OHM P
L5121	945 041 1978	INDUCTOR,330 OHM
L5201	945 041 1978	INDUCTOR,330 OHM
L5202	945 041 1978	INDUCTOR,330 OHM
L5301	945 041 1978	INDUCTOR,330 OHM
L531	645 093 6463	IMPEDANCE,120 OHM P
L5321	945 041 1978	INDUCTOR,330 OHM
L5331	945 041 1978	INDUCTOR,330 OHM
L5332	945 032 8344	INDUCTOR,39U J
L5341	945 041 1978	INDUCTOR,330 OHM
L5361	945 041 1978	INDUCTOR,330 OHM
L5602	945 086 6648	IMPEDANCE,220 OHM P
L5603	945 086 6648	IMPEDANCE,220 OHM P
L5604	945 050 3925	INDUCTOR,10U M
L561	645 093 6463	IMPEDANCE,120 OHM P
L5627	945 086 6662	IMPEDANCE,600 OHM P
L5636	945 086 6662	IMPEDANCE,600 OHM P
L5641	945 050 3925	INDUCTOR,10U M
L5642	945 086 6648	IMPEDANCE,220 OHM P
L5643	945 086 6648	IMPEDANCE,220 OHM P
L5666	945 086 6662	IMPEDANCE,600 OHM P
L5686	945 086 6600	IMPEDANCE,220 OHM P
L6203	945 080 6828	INDUCTOR,3.3U M
L6204	945 080 6828	INDUCTOR,3.3U M
L6261	301 035 4111	MT-GLAZE 0.000 ZA 1/8W
L6266	301 035 4111	MT-GLAZE 0.000 ZA 1/8W
L6268	301 035 4111	MT-GLAZE 0.000 ZA 1/8W
L6671	945 050 3925	INDUCTOR,10U M
L6672	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
L6673	945 080 6828	INDUCTOR,3.3U M
L6674	945 080 6828	INDUCTOR,3.3U M
L6691	945 086 6662	IMPEDANCE,600 OHM P
L7201	945 041 1978	INDUCTOR,330 OHM
L7202	945 041 1978	INDUCTOR,330 OHM
L7203	945 041 1978	INDUCTOR,330 OHM
L7601	945 086 6600	IMPEDANCE,220 OHM P
L7611	945 086 6600	IMPEDANCE,220 OHM P
L7621	945 086 6662	IMPEDANCE,600 OHM P
L7631	945 086 6600	IMPEDANCE,220 OHM P
L7641	945 086 6600	IMPEDANCE,220 OHM P
L7651	945 086 6662	IMPEDANCE,600 OHM P
L7661	945 086 6662	IMPEDANCE,600 OHM P
L7804	945 086 6037	IMPEDANCE,330 OHM P
L7806	945 086 6037	IMPEDANCE,330 OHM P
L7807	945 086 6037	IMPEDANCE,330 OHM P
L7808	945 086 6037	IMPEDANCE,330 OHM P
L7809	945 086 6037	IMPEDANCE,330 OHM P
L7811	945 086 6037	IMPEDANCE,330 OHM P
L7812	945 086 6037	IMPEDANCE,330 OHM P
L7813	945 086 6037	IMPEDANCE,330 OHM P
L7814	945 086 6037	IMPEDANCE,330 OHM P
L7816	945 086 6037	IMPEDANCE,330 OHM P
L7817	945 086 6037	IMPEDANCE,330 OHM P
L7818	945 086 6037	IMPEDANCE,330 OHM P

Electrical Parts List

Key No.	Part No.	Description
L7819	945 086 6037	IMPEDANCE,330 OHM P
L7821	945 041 1978	INDUCTOR,330 OHM
L8001	945 041 1978	INDUCTOR,330 OHM
L8002	945 041 1978	INDUCTOR,330 OHM
L8003	945 041 1978	INDUCTOR,330 OHM
L8004	945 041 1978	INDUCTOR,330 OHM
L8006	945 041 1978	INDUCTOR,330 OHM
L8007	945 041 1978	INDUCTOR,330 OHM
L8161	945 004 6644	INDUCTOR,220 OHM
L8291	945 050 8449	IMPEDANCE,1000 OHM P
L8295	945 050 8449	IMPEDANCE,1000 OHM P
L861	945 041 1978	INDUCTOR,330 OHM
L8821	945 086 6037	IMPEDANCE,330 OHM P
L8822	945 086 6037	IMPEDANCE,330 OHM P
L8823	945 086 6037	IMPEDANCE,330 OHM P
L8831	945 086 6037	IMPEDANCE,330 OHM P
L8832	945 086 6037	IMPEDANCE,330 OHM P
L8833	945 086 6037	IMPEDANCE,330 OHM P
DIODE		
D1001	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D1002	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D1003	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D1004	307 254 2914	ZENER DIODE 02DZ6.8Y(TPH3
D1031	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D1032	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D1051	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D1052	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D1054	307 254 2914	ZENER DIODE 02DZ6.8Y(TPH3
D1061	307 254 2914	ZENER DIODE 02DZ6.8Y(TPH3
D1062	307 254 2914	ZENER DIODE 02DZ6.8Y(TPH3
D1091	307 205 5216	DIODE RB521S-30-TE61
D1092	307 205 5216	DIODE RB521S-30-TE61
D1801	307 163 0414	DIODE 1SS352-(TPH3)
D1802	307 163 0414	DIODE 1SS352-(TPH3)
D2851	307 209 7513	LED SML-210YT T86 L
D2852	307 209 7513	LED SML-210YT T86 L
D2853	307 203 7816	LED SML-210LT T86 M
D2854	307 203 7915	LED SML-210MT T86 M
D2856	307 203 7816	LED SML-210LT T86 M
D2861	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D2862	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D2863	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D2864	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D2866	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D4501	307 163 0414	DIODE 1SS352-(TPH3)
D4601	307 163 0414	DIODE 1SS352-(TPH3)
D4602	307 163 0414	DIODE 1SS352-(TPH3)
D4603	307 163 0414	DIODE 1SS352-(TPH3)
D4621	307 163 0414	DIODE 1SS352-(TPH3)
D4622	307 163 0414	DIODE 1SS352-(TPH3)
D4801	307 254 2914	ZENER DIODE 02DZ6.8Y(TPH3
D4802	307 254 2914	ZENER DIODE 02DZ6.8Y(TPH3
D4807	307 163 0414	DIODE 1SS352-(TPH3)
D5101	307 163 0414	DIODE 1SS352-(TPH3)
D5111	307 163 0414	DIODE 1SS352-(TPH3)
D5291	307 163 0414	DIODE 1SS352-(TPH3)
D5501	307 163 0414	DIODE 1SS352-(TPH3)
D5502	307 163 0414	DIODE 1SS352-(TPH3)
D5561	307 163 0414	DIODE 1SS352-(TPH3)
D5562	307 163 0414	DIODE 1SS352-(TPH3)
D5603	307 254 2716	DIODE CMS16
D5606	307 254 4116	ZENER DIODE RSB6.8CS T2R
D5641	307 254 2716	DIODE CMS16
D5646	307 254 4116	ZENER DIODE RSB6.8CS T2R
D5691	307 163 0414	DIODE 1SS352-(TPH3)
D6261	307 163 0414	DIODE 1SS352-(TPH3)
D6271	307 163 0414	DIODE 1SS352-(TPH3)
D6281	307 163 0414	DIODE 1SS352-(TPH3)
D6531	307 163 0414	DIODE 1SS352-(TPH3)
D6532	307 163 0414	DIODE 1SS352-(TPH3)
D6561	307 163 0414	DIODE 1SS352-(TPH3)
D6562	307 163 0414	DIODE 1SS352-(TPH3)
D6671	307 254 2716	DIODE CMS16
D6672	307 254 4116	ZENER DIODE RSB6.8CS T2R
D6673	307 163 0414	DIODE 1SS352-(TPH3)
D6691	307 163 0414	DIODE 1SS352-(TPH3)
D6801	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D6802	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D6803	307 254 2815	ZENER DIODE 02DZ5.6Y(TPH3
D7241	307 228 1011	LED SML-310MT-M-T86
D7291	307 163 0414	DIODE 1SS352-(TPH3)
D7601	307 163 0414	DIODE 1SS352-(TPH3)
D7611	307 163 0414	DIODE 1SS352-(TPH3)
D7612	307 163 0414	DIODE 1SS352-(TPH3)
D7621	307 163 0414	DIODE 1SS352-(TPH3)
D7641	307 163 0414	DIODE 1SS352-(TPH3)
D7651	307 163 0414	DIODE 1SS352-(TPH3)
D7661	307 163 0414	DIODE 1SS352-(TPH3)
D7831	307 163 0414	DIODE 1SS352-(TPH3)
D7832	307 163 0414	DIODE 1SS352-(TPH3)
D7833	307 163 0414	DIODE 1SS352-(TPH3)
D7834	307 163 0414	DIODE 1SS352-(TPH3)
D7836	307 163 0414	DIODE 1SS352-(TPH3)
D7837	307 163 0414	DIODE 1SS352-(TPH3)
D7838	307 163 0414	DIODE 1SS352-(TPH3)
D7839	307 163 0414	DIODE 1SS352-(TPH3)
D7841	307 163 0414	DIODE 1SS352-(TPH3)
D7842	307 163 0414	DIODE 1SS352-(TPH3)
D8001	407 261 2119	ZENER DIODE 02DZ3.3Z(TPH3
D8161	307 205 5216	DIODE RB521S-30-TE61
D8162	307 205 5216	DIODE RB521S-30-TE61
D8801	307 163 0414	DIODE 1SS352-(TPH3)
D8821	307 224 6515	ZD UDZS4.7B-TE-17
D8831	307 224 6515	ZD UDZS4.7B-TE-17
D8841	307 254 4116	ZENER DIODE RSB6.8CS T2R
D8842	307 254 4116	ZENER DIODE RSB6.8CS T2R
D8843	307 254 4116	ZENER DIODE RSB6.8CS T2R
D8844	307 254 4116	ZENER DIODE RSB6.8CS T2R
MISCELLANEOUS		
K1001	945 078 7899	SOCKET,DVI 24P
K10B	645 089 7696	SOCKET,D-SUB 15P
K10C	945 086 7676	SOCKET,BNC 1P
K10D	645 067 7267	SOCKET,BNC 4P
SC1031	945 076 3503	SURGE-ABSORBER
SC1032	945 076 3503	SURGE-ABSORBER
SC1033	945 076 3503	SURGE-ABSORBER
SC1051	945 076 3503	SURGE-ABSORBER
SC1052	945 076 3503	SURGE-ABSORBER
SC1053	945 076 3503	SURGE-ABSORBER
SW6801	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6802	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6803	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6804	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6806	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6807	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6808	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6809	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6811	945 026 2792	SWITCH,PUSH 1P-1TX1
SW6812	945 026 2792	SWITCH,PUSH 1P-1TX1
SWRST	945 026 2792	SWITCH,PUSH 1P-1TX1
X1351	945 088 7179	OSC,CRYSTAL 27.0MHZ
X1801	645 092 8857	OSC,CRYSTAL 48MHZ

Electrical Parts List

Key No.	Part No.	Description
X4499	945 052 2728	OSC,CRISTAL,25.000MHZ
X6201	945 076 2407	OSC,CRYSTAL 25.000MHZ
X7261	945 076 5194	OSC,CRYSTAL 79.991883MHZ

PACKING MATERIALS

	610 338 7161	CARTON CASE COM-KF7AL
	610 331 3016	CASE ACCESSORY-MZ7A
	610 335 0479	CUSHION SPACER-MZ7A
	610 331 2842	CUSHION FNT-MZ7A
	645 096 4459	POLY BAG-0700X0600*NC*R8P

ACCESSORIES

OWNER'S MANUAL

	610 338 6188	SETUP INST MANUAL-KF7A
	610 341 0890	CD-ROM,OWNERS MANUAL-KF7A-A

REOTE CONTROL

	945 087 1468	ASSY,REMOCON CXTK
	910 319 1820	RC-BATTERY LID-CXSP

⚠ AC CORD

US	945 064 6363	CORD,POWER-3.0MK,US
EU	945 054 1156	CORD,POWER-3.0MK
UK	945 054 1149	CORD,POWER-3.138MK

MISCELLANEOUS

	945 039 7210	CABLE,MOUSE SRAL
	945 063 6937	CABLE,USB
	945 063 6944	CABLE,USB
	945 073 4855	CABLE,INTERFACE VGA
	645 093 1642	CABLE,INTERFACE VGA

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description

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SANYO Electric Co., Ltd.

Diagrams & Drawings

Schematic Diagrams
Printed Wiring Board Drawings

Model	Chassis No.
PLC-ET30L	KF7-ET30L00

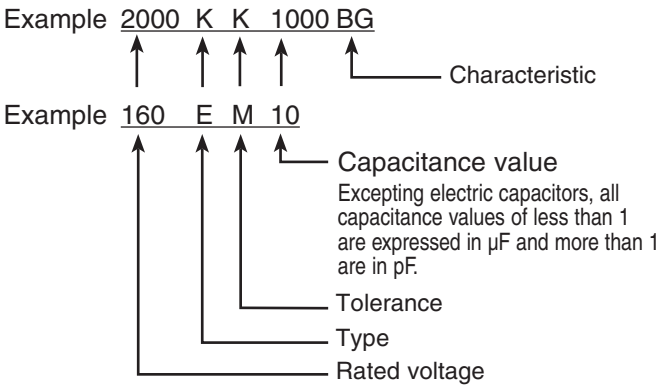
These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. KF7-ET30L00 model PLC-ET30L. File with the service manual No. SM5110953-00

Note:
All the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

Parts description and reading in schematic diagram

1. The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
2. Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
3. Voltages and waveforms were taken with a video color bar signal (1Vp-p at 75 ohms terminated) and controls to normal.
4. Voltages were taken with a high-impedance digital voltmeter.

Capacitor Reading



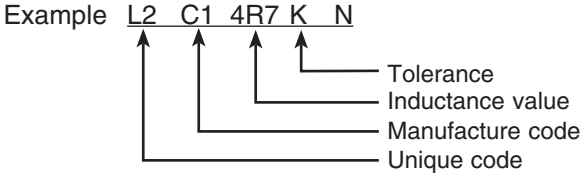
● **Material table**

Mark	Material
E	Electrolytic
P	Electrolytic (non-polarized)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metalized polypropylene
H	Metalized polypromylar
B	Ceramic (semiconductor)
G	Metalized polyestel
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

● **Tolerance table**

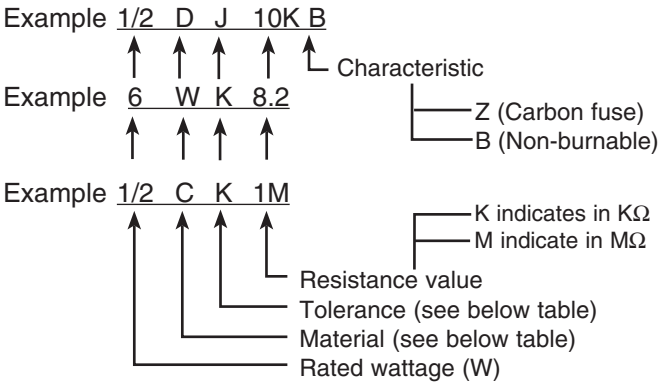
Mark	Tolerance	
A	not specified	
B	±0.1	
C	±0.25	
D	±0.5	
F	±1	
G	±2	
E	±2.5	
H	±3	
J	±5	
K	±10	
M	±20	
N	±30	
P	+100	-0
Q	+30	-10
T	+50	-10
U	+75	-10
V	+20	-10
W	+100	-10
X	+40	-20
Y	+150	-10
Z	+80	-20

Coil Reading



Mark	Tolerance (nH)	Mark	Tolerance (%)
C	±0.25	G	±2
D	±0.5	J	±5
S	±0.3	K	±10
A	±0.2	L	±15
		M	±20

Resistor Reading



Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

● **Material table**

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire wounding or cement
H	Ceramic
F	Fusible

● **Tolerance table**

Mark	Tolerance
A	±0.05
B	±0.1
C	±0.25
D	±0.5
F	±1
G	±2
J	±5
K	±10
M	±20
P	+5 -15
Z	used in 0 ohm

Diode/Transistor Type Reading

● **Diode**

Mark	Type number
R	1S2076A,1S2473,1N4148
AA	1S2076A,1S2473,1SS133,1N4148

● **Transistor**

(1) NPN type

Mark	Type number				
--	2SC536	2SC945A	2SC1815	2SC1740S	
AD	NF, NG	PA, QA	Y, GR	Q, R, S	
AE	NF, NG	PA, QA, RA	O, Y, GR	Q, R, S	

(2) PNP type

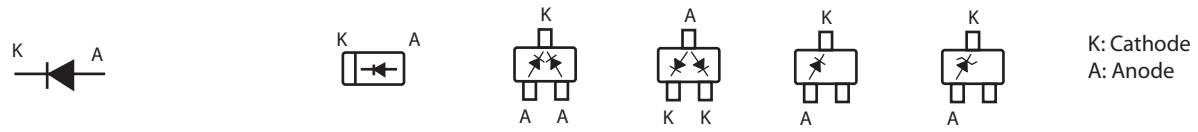
Mark	Type number				
--	2SA608	2SA564A	2SA1015	2SA933S	
AB	NF	R	Y, GR	R	
AC	NF	Q, R	O, Y, GR	Q, R	

(3) Chip type

Mark	Type number				
--	2SA1179N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

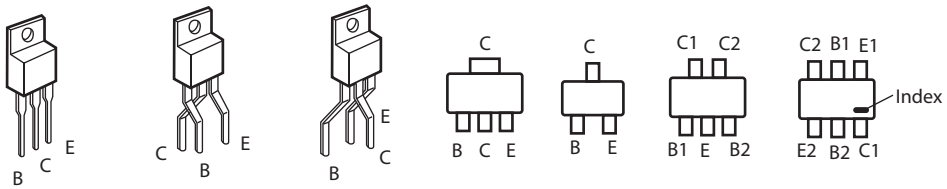
Pin description of diode, transistor and IC

● Diode



K: Cathode
A: Anode

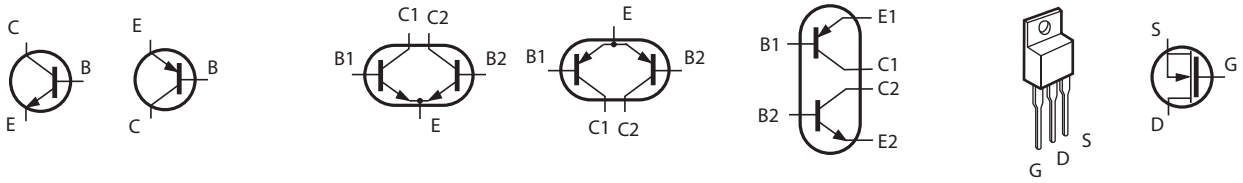
● Transistor/FET



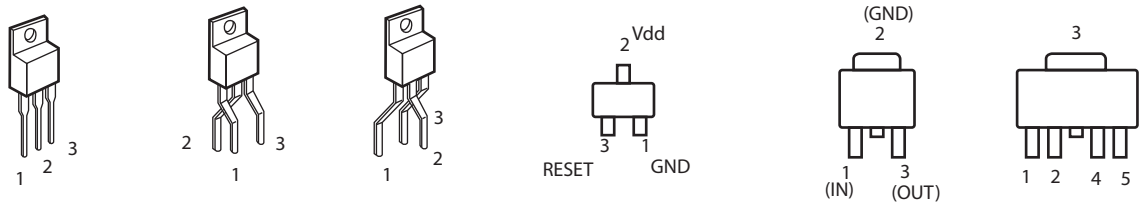
C: Collector
B: Base
E: Emitter

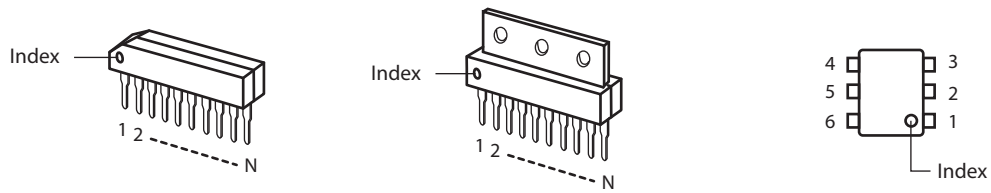
D: Drain
G: Gate
S: Source

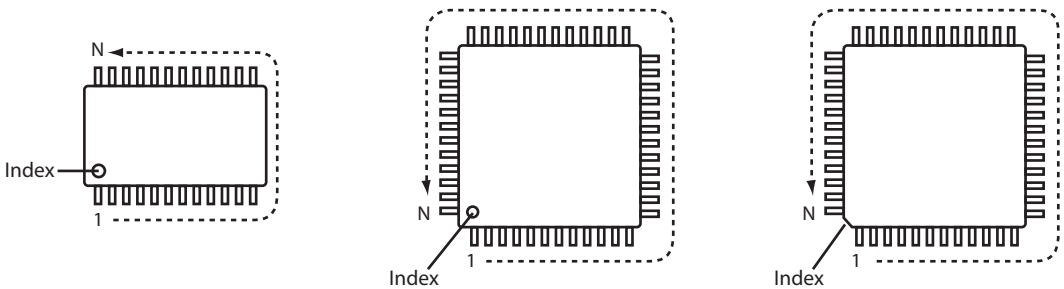
FET

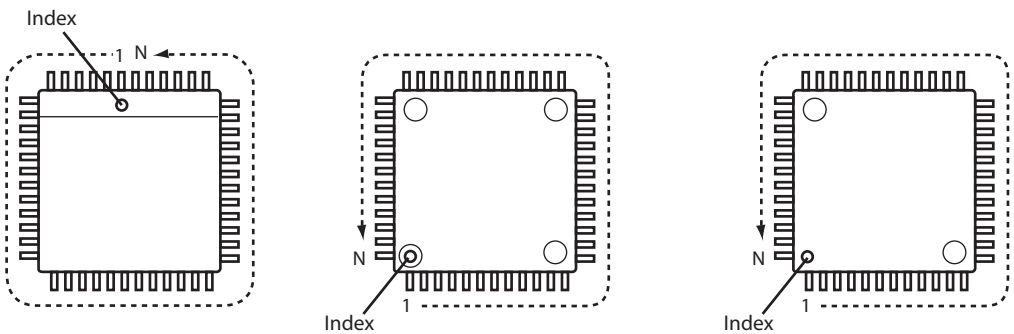


● IC









Note on Soldering

Do not use solder containing lead.

This product has been manufactured using lead-free solder in order to help preserve the environment.

Because of this, be sure to use lead-free solder when carrying out repair work, and never use solder containing lead.

Lead-free solder has a melting point that is 30–40 °C (86–104 °F) higher than solder containing lead, and moreover it does not contain lead which attaches easily to other metals. As a result, it does not melt as easily as solder containing lead, and soldering will be more difficult even if the temperature of the soldering iron is increased.

The extra difficulty in soldering means that soldering time will increase and damage to the components or the circuit board may easily occur.

Because of this, you should use a soldering iron and solder that satisfy the following conditions when carrying out repair work. Also, soldering work must be done in a short time.

Soldering iron

Use a soldering iron which is 70 W or equivalent, and which lets you adjust the tip temperature up to 450 °C (842 °F) It should also have as good temperature recovery characteristics as possible.

Solder

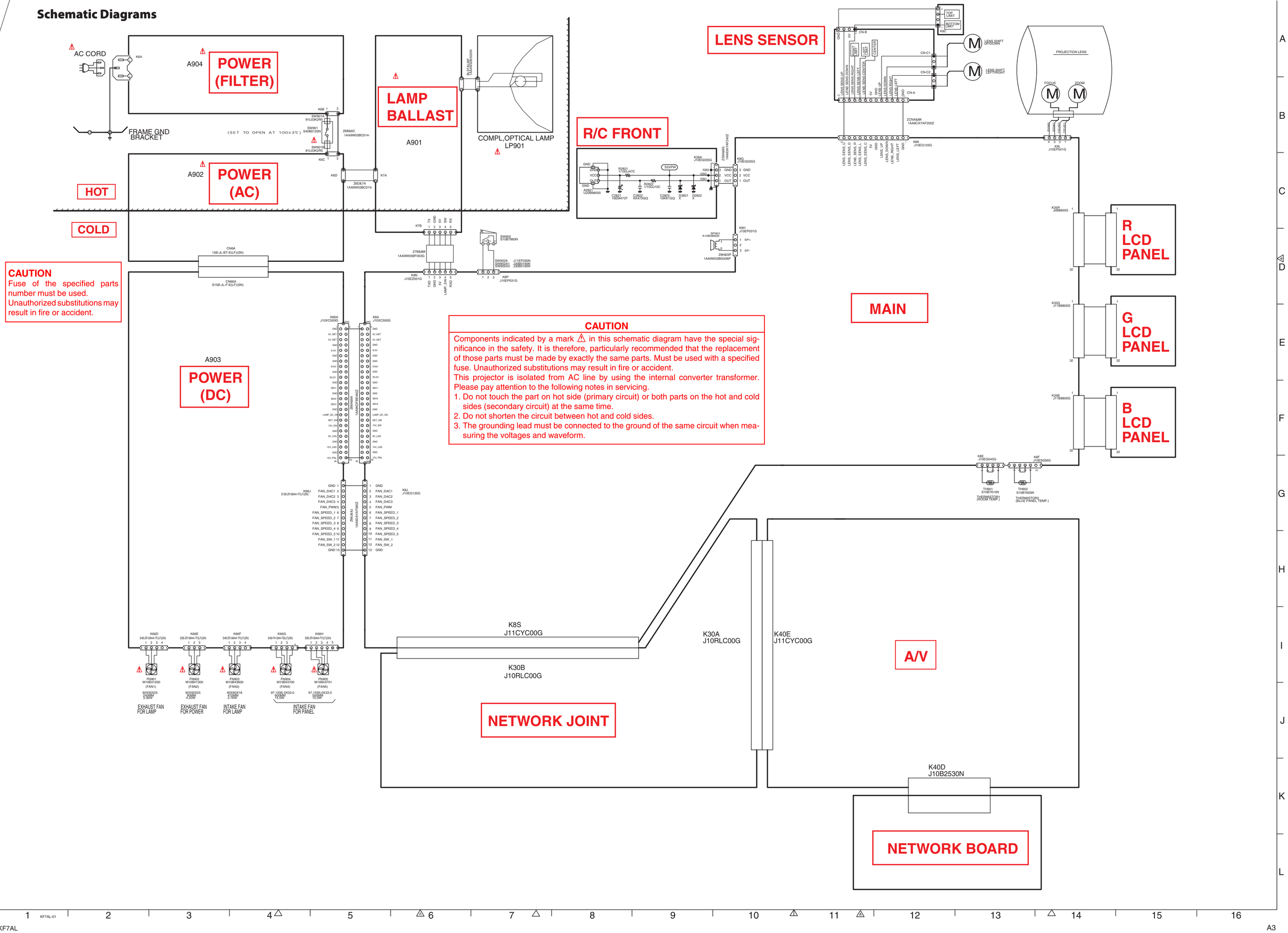
Use solder with the metal content and composition ratio by weight given in the table below. Do not use solders which do not meet these conditions.

Metal content	Tin (Sn)	Silver (Ag)	Copper (Cu)
Composition ratio by weight	96.5 %	3.0 %	0.5 %

Note:

If replacing existing solder containing lead with lead-free solder in the soldered parts of products that have been manufactured up until now, remove all of the existing solder at those parts before applying the lead-free solder.

Schematic Diagrams

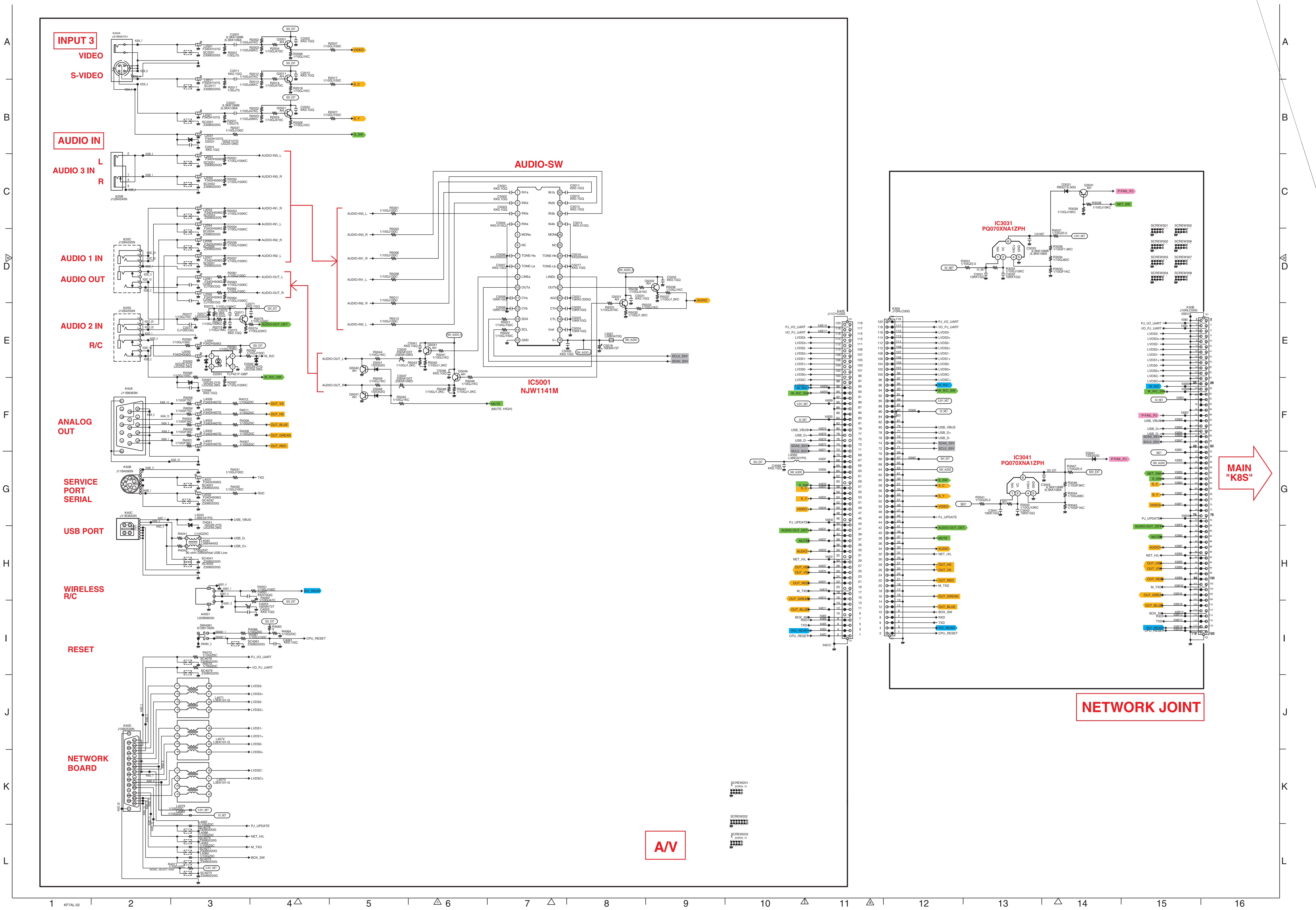


CAUTION
Fuse of the specified parts number must be used.
Unauthorized substitutions may result in fire or accident.

CAUTION

Components indicated by a mark ⚠ in this schematic diagram have the special significance in the safety. It is therefore, particularly recommended that the replacement of those parts must be made by exactly the same parts. Must be used with a specified fuse. Unauthorized substitutions may result in fire or accident.
This projector is isolated from AC line by using the internal converter transformer. Please pay attention to the following notes in servicing.

1. Do not touch the part on hot side (primary circuit) or both parts on the hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring the voltages and waveform.


INPUT 3
VIDEO
S-VIDEO
AUDIO IN
AUDIO 3 IN
L
R
AUDIO 1 IN
AUDIO OUT
AUDIO 2 IN
R/C
ANALOG OUT
SERVICE PORT SERIAL
USB PORT
WIRELESS R/C
RESET
NETWORK BOARD
AUDIO-SW
IC5001
NJW1141M
(MUTE: HIGH)
IC3031
PQ070XNA1ZPH
IC3041
PQ070XNA1ZPH
MAIN "K8S"
NETWORK JOINT
A/V
90 ohm Differential USB Line
K20A J31B06701
K20B J12B4240N
K20C J12B4250N
K20D J12B4250N
K40A J11B8383N
K40B J11B4090N
K40C J11B3652N
K40D J10B2530N
K40E J11CYC00G
K30A J10RLC00G
K30B J10RLC00G
A4051 U20B98500
SW4061 S10B1760N
VIDEO
S_C
S_Y
S_SW
AUDIO-IN3_L
AUDIO-IN3_R
AUDIO-IN1_R
AUDIO-IN1_L
AUDIO-IN2_R
AUDIO-IN2_L
AUDIO-OUT_L
AUDIO-OUT_R
AUDIO-OUT_DET
W_R/C
W_R/C_SW
OUT_VS
OUT_HS
OUT_BLUE
OUT_GREAN
OUT_RED
TXD
RXD
USB_VBUS
USB_D-
USB_D+
R/C_REAR
CPU_RESET
PJ_I/O_UART
I/O_PJ_UART
LVDS3-
LVDS3+
LVDS2-
LVDS2+
LVDS1-
LVDS1+
LVDS0-
LVDS0+
LVDSC-
LVDSC+
PJ_UPDATE
NET_H/L
M_TXD
BOX_SW
AUDIO
MUTE
SCL0_S5V
SDA0_S5V
P-FAIL_PJ
NET_SW
S5V_EXT
S9V_AUDIO
3.3V1_NET
5V_NET
S6V1
SCREW201
SCREW202
SCREW203
SCREW301
SCREW302
SCREW303
SCREW304
SCREW305
SCREW306
SCREW307
SCREW308
KF7AL-02

A4

SCH_KF7AL

INPUT 1

DIGITAL (DVI-D)

DVI-D Pin Assign(SingleLink)

1.TMDS[2-]	8.TMDS[1-]	15.TMDS[0]
2.TMDS[2+]	9.TMDS[1+]	16.TMDS[0+]
3.GND(TMDS[2])	10.GND(TMDS[1])	17.TMDS[0-]
4.NC(TMDS[4-])	11.GND(TMDS[1])	18.GND(TMDS[0])
5.NC(TMDS[4+])	12.NC(TMDS[1-])	19.GND(TMDS[0])
6.DDC_CLK	13.NC(TMDS[1+])	20.NC(TMDS[5-])
7.DDC_DATA	14.+5V	21.GND(TMDS[5])
8.NC(VSB)	15.GND	22.GND(TMDS[5])
	16.HPD	23.TMDS[5+]
		24.TMDS[5-]

100 ohm Differential TMDS Line

DDR-SW

IC8131 TC7W53FU

IC8141 TC7W53FU

IC8101 24C02CT-I

IC8121 TC7WBD125AFK

BUS-SW

DVI HDCP MEMORY

	DDC_SW1
EEPROM-DVI_D	L
EEPROM-PW190	H

	HDCP_IIC_SW
DVI DIGITAL	L
HDCP	H

DVI INTERFACE

IC8001 SII17169CTU

FPGA

IC7201 XC3S50

NETWORK JOINT "K30B"

IC301 SCAN CONVERTER

IC301 SCAN CONVERTER

10 bit-VIDEO A/D IC6201 ISL51002CQZ

INPUT 2

H-SYNC
C-SYNC
V-SYNC
B
Cb/Pb
R
Cr/Pr
G
Y
CV

PC1/PC2-SW

IC5201 THS7347IPHPR

INPUT 1

RGB SCART

IC1061 TC74LVX4053FT

DDC-SW

IC1081 24LC21AT

VGA HDCP MEMORY

	DDC_SW2
EEPROM-DSUB	L
EEPROM-PW392	H

IC5291 PQ070XNB1ZPH

IC5301 AD8057ARTZ

SYNC-SEP. IC5321 BA7078AF

IC5341 TC7SZ04FU

IC5351 TC7SZ04FU

IC6261 PQ070XNB1ZPH

IC6271 PQ1LAX95MSPQ

IC6271 PQ1LAX95MSPQ

IC7291 PQ070XNB1ZPH

IC7281 PQ070XNB1ZPH

MAIN-1

IC7201 FPGA

IC6201 A/D

COLTROL MEMORY

IC1391 24LC64T

IC1311 EDD2526AETA

IC1331 EDD2516AETA

DDR SDRAM

IC861 TC74LCX541FT

BUFFER

IC2811 74LVC1G125GW

IC2801 TC7WT240FU

IC1371 TC7WH125FUK

IC1372 TC7WH125FUK

FLASH MEMORY

IC801 S29GL064A90TFIR30

IC301 PW392

IC4401 FPGA

SCAN CONVERTER & SYSTEM CONTROL

IC5851 TC7WH04FK

IC5841 TC7WH00FK

INPUT EXPANDER

IC1881 TC74LCX541FT

IC1301 PST413A300NR

IC1821 PQ1LAX95MSPQ

I/O EXPANDER

IC1801 TE7783PF ;TE7783APF

RS-232C DRIVER

IC3801 HIN202EIBNZ

IC5691 PQ1LAX95MSPQ

IC5611 FA7701V

IC5681 PQ070XNB1ZPH

IC5631 PQ1LAX95MSPQ

IC5621 PQ1LAX95MSPQ

IC5661 PQ1LAX95MSPQ

IC5651 FA7701V

MAIN-2

TO HDCP-ANALOG DDC

TO ANALOG SW etc

* See parts list for the details

S1.8VPW	WATCHDOG_EN	OE1	OE2	Y 1 ~ Y 0
L	L	H	H	High Impedance
L	H	H	L	High Impedance
H	L	L	H	High Impedance
H	H	L	L	A 1 ~ A 0

R/C_ACTIVE	R/C_CTL0	R/C_CTL1
NORMAL	L	L
FRONT-ONLY	H	L
REAR-ONLY	L	H
WIRED	H	H

POWER

POWER (DC) "K66A"

POWER (DC) "K66J"

FAN_CONTROL FAN_MONITOR

INVERTER

IC7821 74LVC14AP

IC301 SCAN CONVERTER

SDRAM IC3401 MSM56V16160

IC301 SCAN CONVERTER

FPGA IC4401 EP2C35F484

IC401 GAMMA CORRECTION

IC6501 TC7W53FU

IC6541 TC7W53FU

IC6551 74LVC14AP

IC6531 BA6920FP

IC6561 BA9620FP

LENS SHIFT MOTOR UP/DOWN-DRIVER

LENS SHIFT MOTOR LEFT/RIGHT-DRIVER

LENS SENSOR

IC8801 PQ1LAX95MSPQ

IC8841 MCP9801T TEMP. SENSOR

IC5101 PQ020WZ11

IC5111 PQ070XNB1ZPH

THERMISTOR1 TH901 (ROOM TEMP.)

THERMISTOR2 TH902 (BLUE PANEL)

R/C FRONT "K28A"

IC5121 LM4889MM

AUDIO OUTPUT

SPEAKER

IC5502 74LVC14AP

IC5501 BA6287F

IC5551 BA6287F

FOCUS MOTOR DRIVE

ZOOM MOTOR DRIVE

ZOOM FOCUS MOTOR

IC4801 TC74ACT14FT

INVERTER

LAMP BALLAST "CJ2"

SW902

IC6681 FA7701VG

IC6691 PQ1ALX95MSP

IC3471 TC7WH125FUK

IC3472 TC7WH125FUK

KEY SWITCH

IC4891 PQ1LAX95MSPQ

MAIN-3

IC1421
TC7WBD125

IC1431
TC7SZ125FU

IC1401
TC74LCX541

IC4401
FPGA

IC501
LVDS I/F

IC401
L3E07120K0A

<TOP_VIEW>
DIGITAL GAMMA
CORRECTION
LCD DRIVER

IC531
LVDS I/F

IC561
LVDS I/F

IC7601
PQ070XNB1ZPH

IC7611
PQ015YZ01ZPH

MAIN-4

IC7641
PQ070XNB1ZPH

IC7651
PQ1LAX95MSPQ

IC7661
PQ1LAX95MSPQ

IC7621
PQ20WZ11

IC9701
UPC324GR-9LG

IC9703
AD8567

IC9704
UPC324GR-9LG

IC401
GAMMA
CORRECTION

IC501
L3E07200K0A

LVDS INTERFACE

IC401
GAMMA
CORRECTION

IC531
L3E07200K0A

LVDS INTERFACE

IC401
GAMMA
CORRECTION

IC561
L3E07200K0A

LVDS INTERFACE

R-LCD
PANEL

G-LCD
PANEL

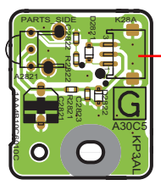
B-LCD
PANEL

MAIN-5

NO DATA

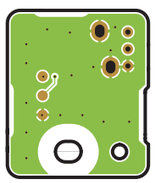
Printed Wiring Board Diagrams

R/C FRONT (SIDE:A)



MAIN
“K8G”

R/C FRONT (SIDE:B)



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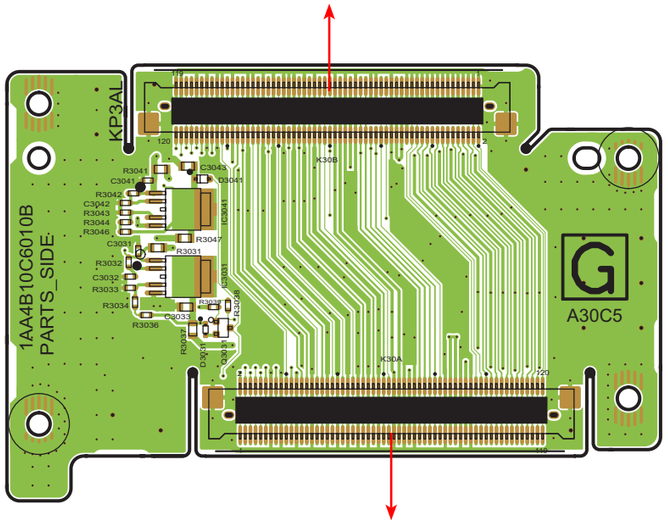
> 2. Do not shorten the circuit between hot and cold sides.
> 3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

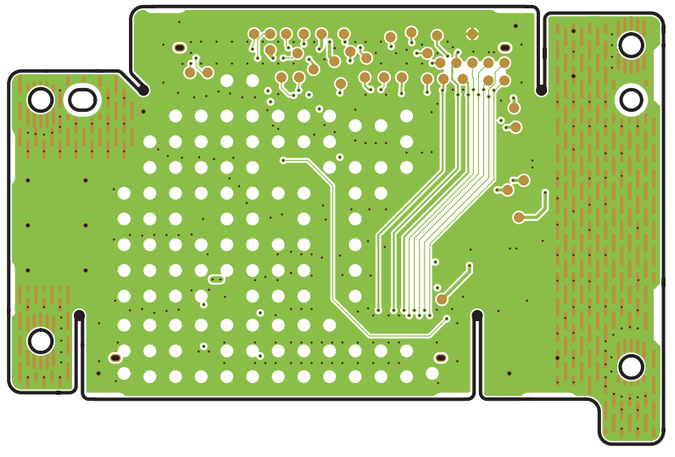
NETWORK JOINT (SIDE:A)

MAIN “K8S”

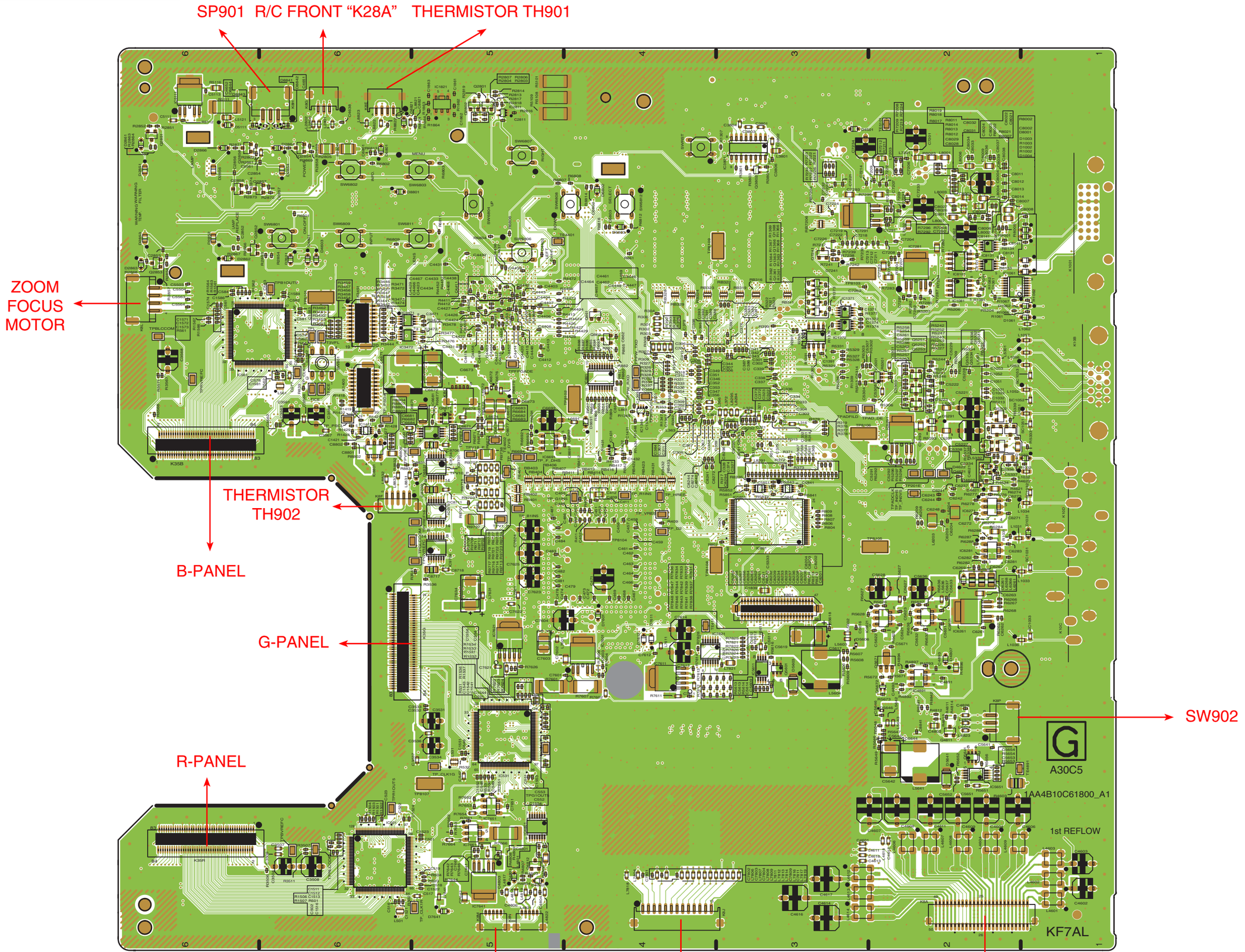


A/V “K40E”

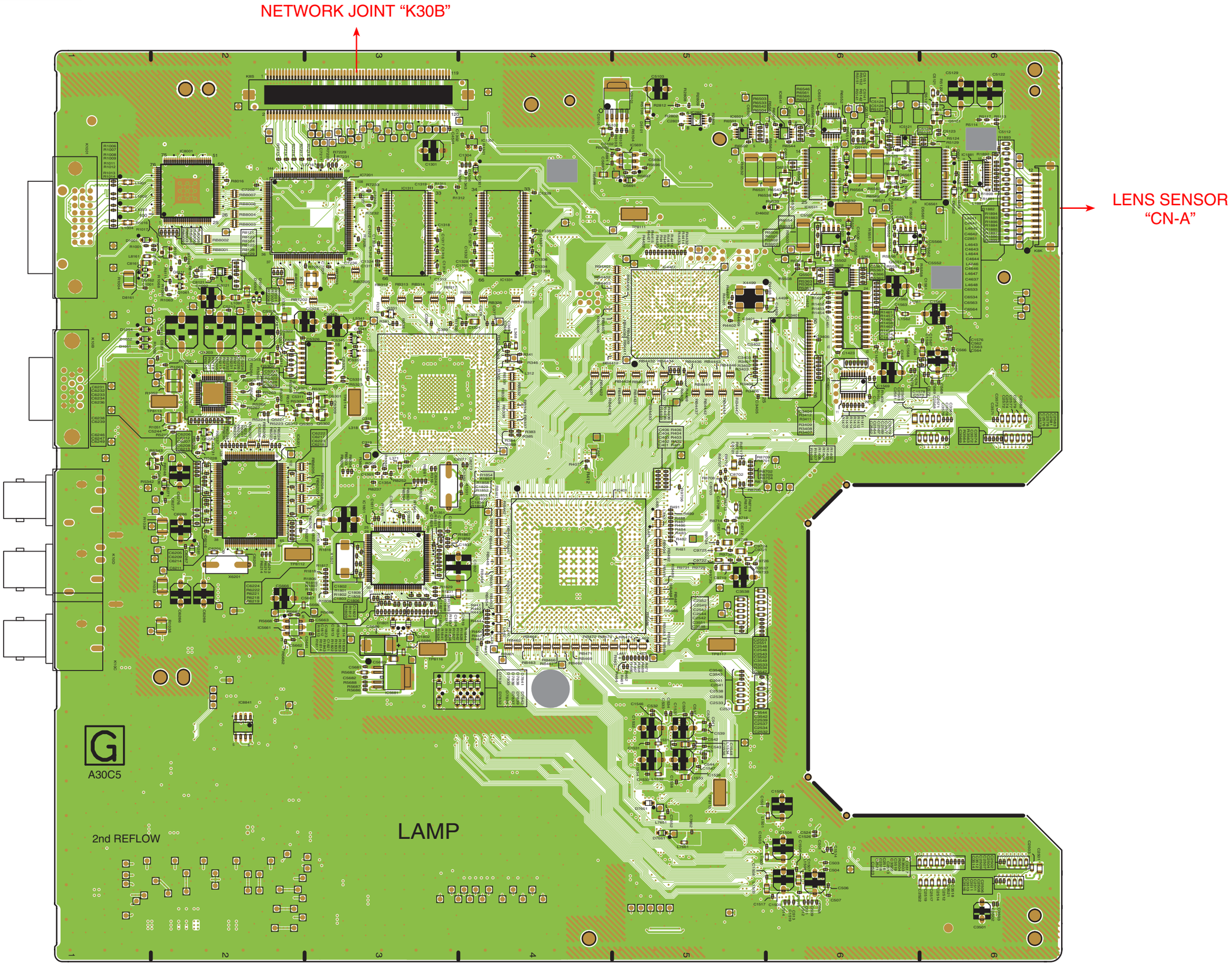
NETWORK JOINT (SIDE:B)



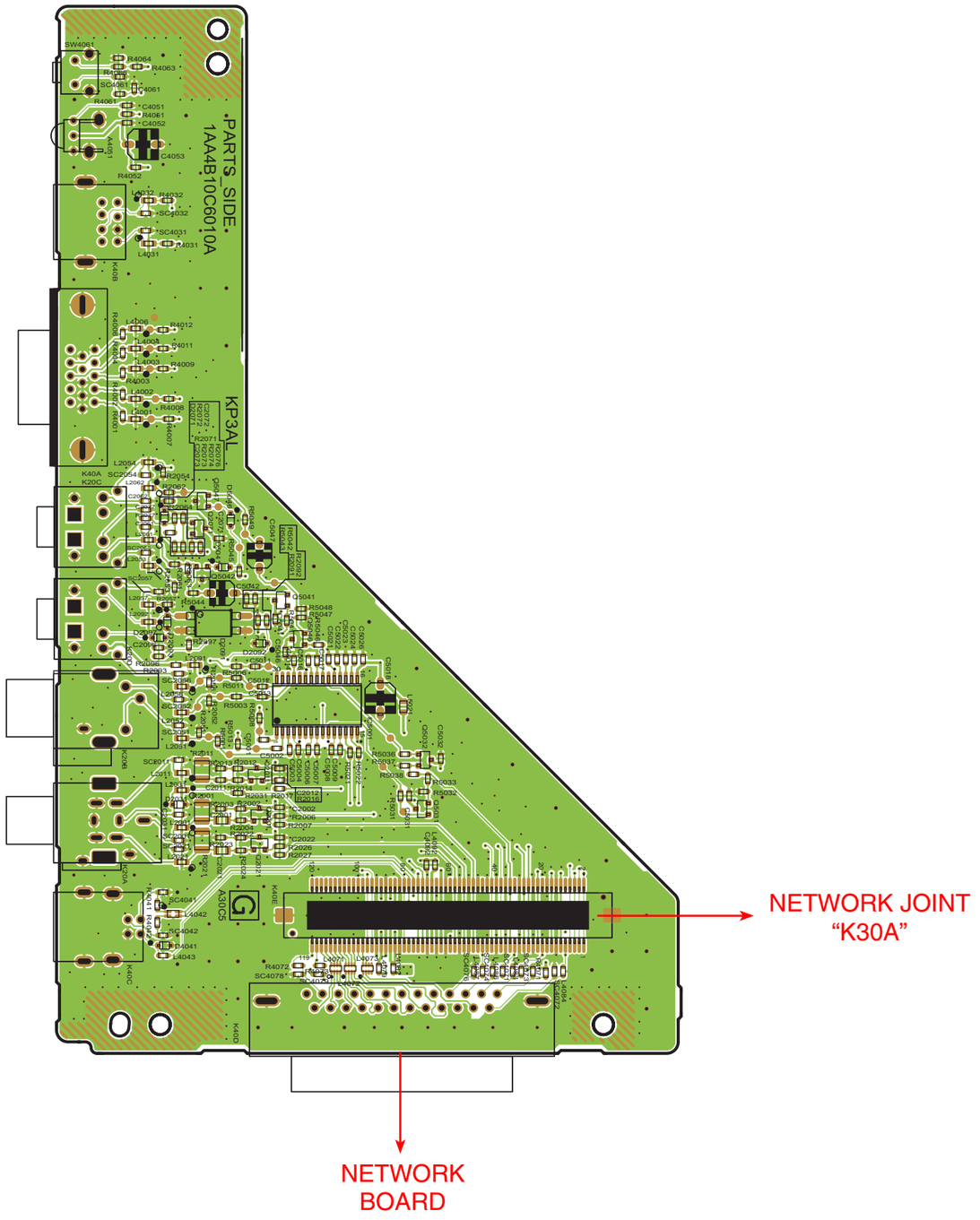
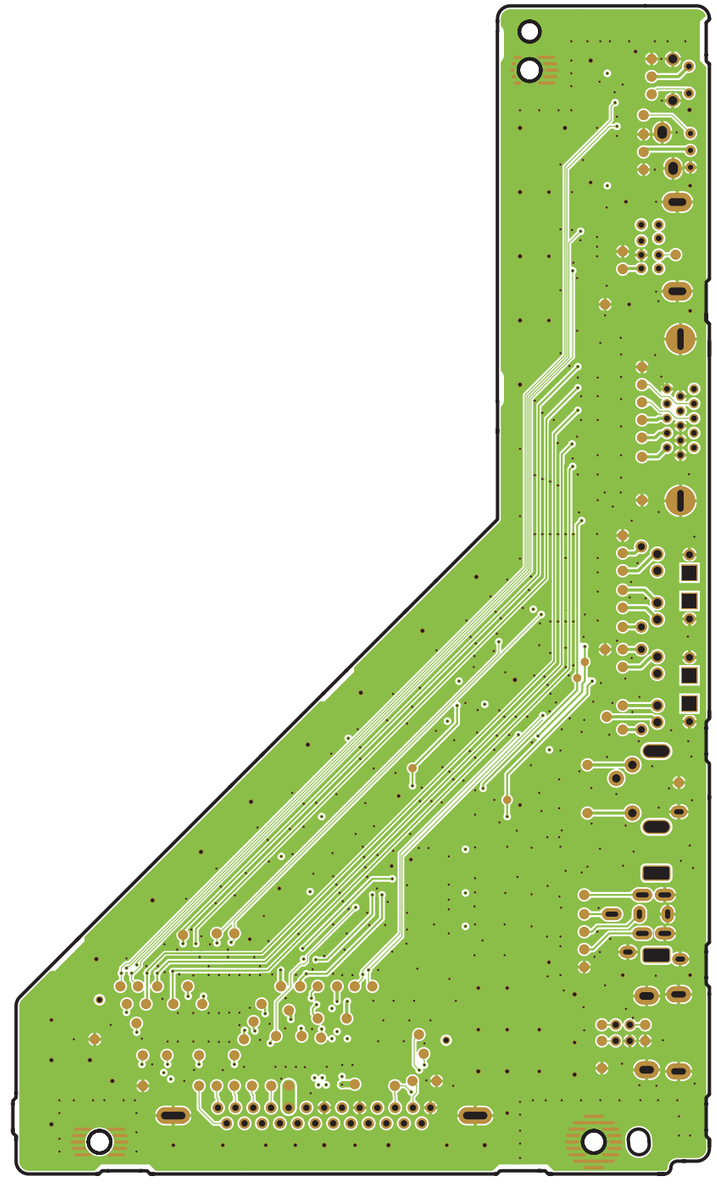
MAIN (SIDE:A)


SP901
R/C FRONT “K28A”
THERMISTOR TH901
ZOOM FOCUS MOTOR
THERMISTOR TH902
B-PANEL
G-PANEL
R-PANEL
SW902
LAMP BALLAST “K7B”
POWER(DC) “K66J”
POWER(DC) “K66A”
G
A30C5
1AA4B10C61800_A1
1st REFLOW
KF7AL

MAIN (SIDE:B)



AV (SIDE:A)



AV (SIDE:B)